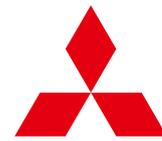**MITSUBISHI ELECTRIC**

Changes for the Better

FACTORY AUTOMATION

e-F@ctory

Graphic Operation Terminal

GOT2000 Series/
GOT SIMPLE Series

GOT2000
Graphic Operation Terminal

GOTSIMPLE
Graphic Operation Terminal

- ● Innovative display features in a simple body

- ● Enhanced lineup with rugged model for wider applications

- ● Advanced user-friendly features of HMI/GOT Screen Design Software GT Works3

GLOBAL IMPACT OF MITSUBISHI ELECTRIC

Through Mitsubishi Electric's vision, "Changes for the Better" are possible for a brighter future.

Changes for the Better

We bring together the best minds to create the best technologies. At Mitsubishi Electric, we understand that technology is the driving force of change in our lives. By bringing greater comfort to daily life, maximizing the efficiency of businesses and keeping things running across society, we integrate technology and innovation to bring changes for the better.

Mitsubishi Electric is involved in many areas including the following:

Energy and Electric Systems
A wide range of power and electrical products from generators to large-scale displays.

Electronic Devices
A wide portfolio of cutting-edge semiconductor devices for systems and products.

Home Appliance
Dependable consumer products like air conditioners and home entertainment systems.

Information and Communication Systems
Commercial and consumer-centric equipment, products and systems.

Industrial Automation Systems
Maximizing productivity and efficiency with cutting-edge automation technology.

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HMI lineup

GOT2000 Series

GT27 — Advanced model with multi-touch gesture functions

| Ethernet | RS-232 | RS-422/485 | CC-Link IE TSN | CC-Link IE Control | CC-Link IE Field*1 | CC-Link IE Field Basic | CC-Link | Bus | MELSECNET |

*1 The CC-Link IE Field Network communication unit and GOT set is also available.

15 inch
TFT 65536 colors | AC | DC
XGA 1024×768
GT2715-XTBA
GT2715-XTBD

12.1 inch
TFT 65536 colors | AC | DC
SVGA 800×600
GT2712-STBA
GT2712-STBD
GT2712-STWA [White model]
GT2712-STWD [White model]

10.4 inch
TFT 65536 colors | AC | DC
SVGA 800×600
GT2710-STBA
GT2710-STBD
VGA 640×480
GT2710-VTBA
GT2710-VTBD
GT2710-VTWA [White model]
GT2710-VTWD [White model]

GT25 — High performance, cost efficient, mid-range model

| Ethernet | RS-232 | RS-422/485 | CC-Link IE TSN*2 | CC-Link IE Control*2 | CC-Link IE Field*1*2 | CC-Link IE Field Basic | CC-Link*2 | Bus*2 | MELSECNET*2 |

*1 The CC-Link IE Field Network communication unit and GOT set is also available. *2 Not supported by GT2505.

12.1 inch
TFT 65536 colors | AC | DC
SVGA 800×600
GT2512-STBA
GT2512-STBD

10.4 inch
TFT 65536 colors | AC | DC
VGA 640×480
GT2510-VTBA
GT2510-VTBD
GT2510-VTWA [White model]
GT2510-VTWD [White model]

8.4 inch
TFT 65536 colors | AC | DC
VGA 640×480
GT2508-VTBA
GT2508-VTBD
GT2508-VTWA [White model]
GT2508-VTWD [White model]

GT25 Wide — GOT2000 widescreen expands your view

| Ethernet (2 ports) | RS-232 | RS-422/485 | CC-Link IE Field Basic | Sound output (built-in) |

10.1 inch
TFT 65536 colors | DC
WXGA 1280×800
GT2510-WXTBD
GT2510-WXTSD

7 inch
TFT 65536 colors | DC
WVGA 800×480
GT2507-WTBD
GT2507-WTSD

GT25 Rugged

| Ethernet (2 ports) |
| RS-232 | RS-422/485 |
| CC-Link IE Field Basic |
| Sound output (built-in) |

7 inch
TFT 65536 colors | DC
WVGA 800×480
GT2507T-WTSD

GT23 — Unchallenged cost performance

| Ethernet | RS-232 | RS-422/485 | CC-Link IE Field Basic |

10.4 inch
TFT 65536 colors | AC | DC
VGA 640×480
GT2310-VTBA
GT2310-VTBD

8.4 inch
TFT 65536 colors | AC | DC
VGA 640×480
GT2308-VTBA
GT2308-VTBD

GT21 Wide

| Ethernet | RS-232 |
| RS-422/485 |
| CC-Link IE Field Basic |

7 inch
TFT 65536 colors | DC
WVGA 800×480
GT2107-WTBD
GT2107-WTSD

GT Works3

GOT Screen Design Software
MELSOFT GT Works3
Professional designs in just a few clicks

SoftGOT

USB port
license key

GOT2000 compatible HMI software
GT SoftGOT 2000 *Version1*
Make visualization of production accessible

MELIPC Series (related products)

Panel computer with Windows® OS

MI3000

| Ethernet (3 ports) | RS-232 |
| RS-422/485 | DisplayPort | Sound output |

| Multi-touch gesture | Multimedia*2 | Video/RGB*2 | Sound output | External I/O |

*2 Not supported by GT2705.

8.4 inch

| TFT 65536 colors | AC |
| | DC |

| SVGA 800×600 | GT2708-STBA GT2708-STBD |
| VGA 640×480 | GT2708-VTBA GT2708-VTBD |

5.7 inch

| TFT 65536 colors | DC |

| VGA 640×480 | GT2705-VTBD |

21.5 inch /
15 inch

| TFT 16.77 million colors | DC |

NEW

| Full HD 1920×1080 | MI3321G-W |
| XGA 1024×768 | MI3315G-W |

| Sound output*2 | External I/O*2 |

GT25
Handy

HMI functionality in the palm of your hand

| Ethernet | RS-232 | RS-422/485*1 | CC-Link IE Field Basic |

*1 GT2505HS supports RS-422 only.

5.7 inch

| TFT 65536 colors | DC |

| VGA 640×480 | GT2505-VTBD |

6.5 inch

| TFT 65536 colors | DC |

| VGA 640×480 | GT2506HS-VTBD |

5.7 inch

| TFT 65536 colors | DC |

| VGA 640×480 | GT2505HS-VTBD |

GT25
Open frame

A new style of GOT2000

| Ethernet | RS-232 | RS-422/485 | CC-Link IE TSN | CC-Link IE Control | CC-Link IE Field | CC-Link IE Field Basic | CC-Link | Bus | MELSECNET | Sound output | External I/O |

12.1 inch

| TFT 65536 colors | AC |
| | DC |

| SVGA 800×600 | GT2512F-STNA GT2512F-STND |

10.4 inch

| TFT 65536 colors | AC |
| | DC |

| VGA 640×480 | GT2510F-VTNA GT2510F-VTND |

8.4 inch

| TFT 65536 colors | AC |
| | DC |

| VGA 640×480 | GT2508F-VTNA GT2508F-VTND |

GT21

Compact models with basic functions

| Ethernet*1 | RS-232*1 | RS-422/485*1 | CC-Link IE Field Basic*2 |

*1 Supported interfaces vary depending on the model.
 Please refer to descriptions in [ ] after the model.
*2 Supported only by the models equipped with an Ethernet port.

4.3 inch

| TFT 65536 colors | DC |

| 480×272 | GT2104-RTBD [Ethernet, RS-232, RS-422/485] |

3.8 inch

| TFT mono-chrome | DC |
| 5-color LED | |

| 320×128 | GT2103-PMBD [Ethernet, RS-422/485] GT2103-PMBDS [RS-232, RS-422/485] GT2103-PMBDS2 [RS-232 × 2 channels] GT2103-PMBLS [RS-422] 5 V DC type |

GOT SIMPLE Series

Simple model having excellent cost performance

GS21

| Ethernet | RS-232 | RS-422 |
| CC-Link IE Field Basic |

10 inch / **7** inch

| TFT 65536 colors | DC |

| WVGA 800×480 | GS2110-WTBD GS2107-WTBD |

For the status of conforming to various standards and laws, please refer to the Mitsubishi Electric Factory Automation Global website (**www.MitsubishiElectric.com/fa/**).

GT27 model

Advanced model with multi-touch gesture functions

A wide variety of specifications suit every system design

Communication interfaces such as Ethernet, RS-232, RS-422/485, USB host/device and SD memory card are standard features. High capacity data processing ensure smooth screen operation even when multiple tasks, such as logging, script, alarm, or device data transfer, are running. In addition, image recording, image playback, video image input, and RGB output are available*, thus all the functions of GOT2000 can be used on GT27 models. * Excluding GT2705

Item	Specifications
Display	5.7"/8.4"/10.4"/12.1"/15", TFT color LCD, 65536 colors
Resolution	XGA, SVGA, VGA
Backlight	White LED
User memory	Memory for storage (ROM): 57 MB (GT2705 has 32 MB) Memory for operation (RAM): 128 MB (GT2705 has 80 MB)
Standard interface	Ethernet, RS-232, RS-422/485 USB host (USB-A): 2 channels* (USB 2.0 (High-Speed 480 Mbps)) USB device (USB Mini-B): 1 channel (USB 2.0 (High-Speed 480 Mbps)) SD memory card interface
Extension interface	CC-Link IE TSN NEW , CC-Link IE Control, CC-Link IE Field, CC-Link, bus, MELSECNET/H
Side interface	For installing a wireless LAN communication unit

* White model has 1 channel.

With Backup/Restoration function, fear troubles no more!

The programs and parameters of the programmable controller CPU can be backed up to the SD memory card or USB memory device in the GOT. In case of a CPU failure, users can perform batch operation to restore the data to the controller.

Replace CPU

Restore

2

Hardware

■ GT27 model external appearance [Standard model: front face/rear face]

❶ Human sensor
The unit automatically detects an operator approaching the unit and displays the screen.
* GT2715, GT2712 only

❷ USB interface: device (USB Mini-B)
Connect to a personal computer and transfer data.
* Standard models: front face only
* White models: rear face only

❸ USB interface: host (USB-A)*1
Transfer project data or read the data (logging data, etc.) to or from the GOT using the USB memory.
A USB mouse, keyboard, barcode reader*2, or RFID reader*2 can also be connected.
*1   White models: rear face only
*2   USB keyboard (HID) compatible model only

❹ Extension interface
Communication and option units can be installed.

❺ Ethernet interface
Use Ethernet to simultaneously connect up to four types of industrial devices from different manufacturers. CC-Link IE Field Network Basic compatible devices can also be connected.

❻ RS-232 interface
Connect to various industrial devices, barcode readers and serial printers.

❼ RS-422/485 interface
Connect to various industrial devices and barcode readers.

❽ Side interface
Install a wireless LAN communication unit.

❾ SD memory card interface
Save large volumes of data, including alarms and logging data.

■ GT27 model external appearance [White model: front face]

❶ Human sensor
The unit automatically detects an operator approaching the unit and displays the screen.
* GT2712 only

❷ Flat body
The front flat screen is easy to clean.
(USB interface is on the back.)

❸ White body
The white model portrays a clean image.

White model features

GOT is acceptable for use in hazardous locations classified by various safety standards (Class I, Division 2 [the United States, Canada], ATEX [Europe], KCs [Korea]).

* Supported standards vary depending on the model. For the details, please refer to page 75.

2

Hardware

GT25 model

High performance, cost efficient, mid-range model

A wide variety of specifications suit every system design

Communication interfaces such as Ethernet, RS-232, RS-422/485, USB host/device and SD memory card are standard features. High capacity data processing ensure smooth screen operation even when multiple tasks, such as logging, script, alarm, or device data transfer, are running.

Item	Specifications
Display	5.7"/8.4"/10.4"/12.1", TFT color LCD, 65536 colors
Resolution	SVGA, VGA
Backlight	White LED
User memory	Memory for storage (ROM): 32 MB Memory for operation (RAM): 80 MB
Standard interface	Ethernet, RS-232, RS-422/485 USB host (USB-A): 2 channels*1 (USB 2.0 (High-Speed 480 Mbps)) USB device (USB Mini-B): 1 channel (USB 2.0 (High-Speed 480 Mbps)) SD memory card interface
Extension interface*2	CC-Link IE TSN NEW , CC-Link IE Control, CC-Link IE Field, CC-Link, bus, MELSECNET/H
Side interface*2	For installing a wireless LAN communication unit

*1 GT2505 and white model have 1 channel.

*2 GT2505 does not have the extension interface and the side interface.

FA Transparent function simplify your debugging work!

By connecting a personal computer to the front USB interface on the GOT, the GOT acts as a transparent gateway to enable startup and adjustment of equipment. Users do not have to bother with opening the electrical cabinet or changing cable connections.

There's no need to open the electrical cabinet!

■ GT25 standard model external appearance [front face/rear face] * Excluding GT2505

❶ **USB interface: device (USB Mini-B)**
Connect to a personal computer and transfer data.
* Standard models: front face only
* White models: rear face only

❷ **USB interface: host (USB-A)*¹**
Transfer project data or read the data (logging data, etc.) to or from the GOT using the USB memory.
A USB mouse, keyboard, barcode reader*², or RFID reader*² can also be connected.
*1   GT2505, white models: rear face only
*2   USB keyboard (HID) compatible model only

❸ **Extension interface**
Communication and option units can be installed.

❹ **Ethernet interface**
Use Ethernet to simultaneously connect up to four types of industrial devices from different manufacturers. CC-Link IE Field Network Basic compatible devices can also be connected.

❺ **RS-232 interface**
Connect to various industrial devices, barcode readers and serial printers.

❻ **RS-422/485 interface**
Connect to various industrial devices and barcode readers.

❼ **Side interface**
Install a wireless LAN communication unit.

❽ **SD memory card interface**
Save large volumes of data, including alarms and logging data.

■ GT2505 external appearance [front face/rear face]

■ GT25 white model external appearance [front face]

❾ **Simple design**
In the same way as the standard model, the stylish and simple design with a linear motif is sleek and complements any machine design.

❿ **Flat body**
The front flat screen is easy to clean.
(USB interface is on the back.)

⓫ **White body**
The white model portrays a clean image.

White model features

GOT is acceptable for use in hazardous locations classified by various safety standards (Class I, Division 2 [the United States, Canada], ATEX [Europe], KCs [Korea]).

* Supported standards vary depending on the model. For the details, please refer to page 75.

GT25 wide model

GOT2000 widescreen expands your view

Smart silver

Cool black

For the details of GT25 wide models,
please refer to the Graphic Operation Terminal
GOT2000 Series Wide Model catalog (L(NA)08461ENG).

Various interfaces are equipped in a compact body

The stylish design realized with a narrow bezel. The GOT2000 wide models are available in a choice of silver and black.
Two Ethernet ports and the built-in sound output interface* equipped as standard add value to your system.

* A speaker with built-in amplifier is required separately.

Item	Specifications
Display	7" widescreen/10.1" widescreen, TFT color LCD, 65536 colors
Resolution	7": WVGA, 10.1": WXGA
Backlight	White LED
User memory	Memory for storage (ROM): 32 MB Memory for operation (RAM): 128 MB
Standard interface	Ethernet (2 ports), RS-232, RS-422/485 USB host (USB-A): 1 channel (USB 2.0 (High-Speed 480 Mbps)) USB device (USB Mini-B): 1 channel (USB 2.0 (High-Speed 480 Mbps)) Sound output interface (ϕ3.5 minijack), SD memory card interface
Extension interface	–
Wireless LAN communication unit interface	For installing a wireless LAN communication unit

Ultra high resolution display improves expressiveness

Ultra high resolution WXGA screen* displays necessary and sufficient information on one screen. Small characters can be displayed clearly.

* WXGA display on the 10.1 inch model. WVGA display on the 7 inch model.

About 3.3 times higher resolution displays small characters clearly

VGA

WXGA

* 10.1 inch model

Add value to your system with sound notification

The built-in sound output interface makes it easy to implement the sound notification system (page 77, page 118). Not only by displaying the contents of events on the screen but also by notifying with sound, you can convey the necessary information to the operators.

Please remove the workpiece.

Sound output device
(speaker with built-in amplifier, etc.)

Enable separation of information and control system networks

Two Ethernet ports physically separate the information system network in the office from the control system network at the production site. The network architecture becomes safer and more secure by setting different IP addresses for each network.

Information system network
(IP address: 192.168.3.**)

Ethernet

Control system network
(IP address: 192.168.5.**)

Ethernet

2

Hardware

■ GT25 wide model external appearance [front face/rear face]

❶ **USB interface: device (USB Mini-B)**
Connect to a personal computer and transfer data.

❷ **USB interface: host (USB-A)**
Transfer project data or read the data (logging data, etc.) to or from the GOT using the USB memory. A USB mouse, keyboard, barcode reader*, or RFID reader* can also be connected.
* USB keyboard (HID) compatible model only

❸ **Ethernet interface (2 ports)**
Use Ethernet to simultaneously connect up to four types of industrial devices from different manufacturers. CC-Link IE Field Network Basic compatible devices can also be connected.

❹ **RS-422/485 interface**
Connect to various industrial devices and barcode readers.

❺ **RS-232 interface**
Connect to various industrial devices, barcode readers and serial printers.

❻ **Sound output interface (φ3.5 minijack)**
Output sound by connecting φ3.5 stereo mini-plug (3-prong).

❼ **SD memory card interface**
Save large volumes of data, including alarms and logging data.

❽ **Wireless LAN communication unit interface**
Install a wireless LAN communication unit.

GT25 handy GOT

HMI functionality in the palm of your hand

For the details of GT25 handy GOT, please refer to the Graphic Operation Terminal GOT2000 Series Handy GOT catalog (L(NA)08506ENG).

GOT2000 Series handy GOT

With portable handy GOT, you can operate your machines while standing next to them.

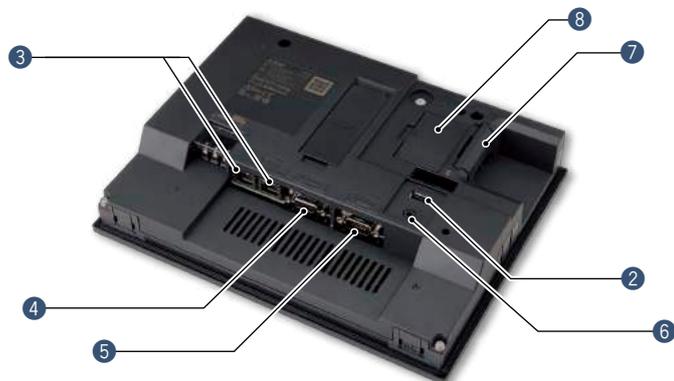| Item	Specifications	
	GT2506HS-VTBD	**GT2505HS-VTBD**
Display	6.5", TFT color LCD, 65536 colors	5.7", TFT color LCD, 65536 colors
Resolution	VGA	
Backlight	White LED	
User memory	Memory for storage (ROM): 32 MB	
	Memory for operation (RAM): 80 MB	
Standard interface	Ethernet*2, RS-232*1*2, RS-422/485*1*2 USB host (USB-A): 1 channel (USB 2.0 (High-Speed 480 Mbps)) USB device (USB Mini-B): 1 channel (USB 2.0 (High-Speed 480 Mbps)) SD memory card interface	

*1　When using GT2506HS, select one channel from RS-232 or RS-422/485.

*2　When using GT2505HS, select one channel from Ethernet, RS-232, or RS-422. RS-485 cannot be used.

■ Example of connecting GT25 handy GOT and industrial devices

GT2506HS-VTBD

| Ethernet connection | Serial connection |

- The maximum distance between the connector conversion box and the GOT is 10 m.
- Up to four different industrial devices are connectable.

24 V DC power supply, emergency stop circuit, etc.

RS-232 or RS-422/485

Programmable controller

External connection cable

Ethernet

Ethernet and serial connection can be used simultaneously

Connector conversion box GT16H-CNB-42S

HUB

Programmable controller

Connector conversion box

Used to connect handy GOT and industrial devices via Ethernet or serial connection.

Connector conversion box	GT2506HS		GT2505HS	
	Ethernet	RS-232, RS-422/485	Ethernet	RS-232, RS-422
GT16H-CNB-42S **ID number recognition function supported**	○	○	○	–
GT16H-CNB-37S	○	–	○	–
GT11H-CNB-37S	–	–	–	○

GT2505HS-VTBD

| Ethernet connection | Serial connection |

Ethernet connection

- The maximum distance between the connector conversion box and the GOT is 10 m.
- Up to four different industrial devices are connectable.

Connector conversion box GT16H-CNB-42S

External connection cable

24 V DC power supply, emergency stop circuit, etc.

Ethernet

HUB

Programmable controller

Programmable controller

Serial connection

- Select either of RS-232 or RS-422.
- The maximum distance between the connector conversion box and the GOT is 10 m.

Connector conversion box GT11H-CNB-37S

24 V DC power supply, emergency stop circuit, etc.

External connection cable

RS-232 or RS-422

Programmable controller

■ GT2506HS external appearance [front face/rear face]

OFF-ON-OFF
Reset — Reset

■ GT2505HS external appearance [front face/rear face]

❶ Emergency stop switch
An emergency stop switch is used to stop the operation of devices in case of an emergency. It utilizes a "normally closed contact" for safety.

❷ LED operation switches (GT2506HS)/ Operation switches (GT2505HS)
The switches can be used to operate and stop machines. Hard switches on the operation panel are no longer required. These switches can be wired to inputs of programmable controllers and other devices.

❸ SD memory card interface
Save large volumes of data, including alarms and logging data.

❹ USB interface: device (USB Mini-B)
Connect to a personal computer and transfer data.

❺ USB interface: host (USB-A)
Transfer project data or read the data (logging data, etc.) to or from the GOT using the USB memory.

❻ Keylock switch (2-position switch))
Operators can be restricted depending on the operation, such as switching manual/automatic operation or selecting the modes. Once the key is pulled out, others cannot operate it. The switch is used with wiring to the input of programmable controllers.

❼ Grip switch
The three-position (OFF-ON-OFF) type deadman switch is adopted as an interlock for preventing operation mistakes and prohibiting operation of a machine. The switch can directly control external equipment to give immediate stop commands to a machine. The switch can be wired to inputs of programmable controllers and other devices.

GT2505HS

Wall-mounting attachment for Handy GOT GT14H-50ATT

The wall-mounting attachment for handy GOT is to place the GT2505 Handy GOT while it is not being used.

Firmly held with four posts, the GOT can be stably placed on the attachment. When you use the GOT, you can quickly remove it and start operation.

Operating in hand — Not being used

GT25 rugged model

Wide operating temperature range model with a stylish metal housing

For the details of the GT25 rugged model,
please refer to the Graphic Operation Terminal
GOT2000 Series Rugged Model catalog (L(NA)08555ENG).

2

Hardware

Suitable for outdoors or in non air-conditioned rooms

The working ambient temperature has been expanded to -20°C to 65°C. The high-brightness LCD panel (2 times brighter than non-rugged models) provides a clear screen view when installed outdoors. The rugged model is ultraviolet ray resistant with an environmental protection sheet that has UV protection function.

* Note that the structure does not guarantee protection in all users' environments.

High brightness, clear visibility under daylight

The high-brightness LCD panel (1000 cd/m^2*) provides a clear screen view even under strong sunlight.

* Brightness of independent panel.

Standard model

2x brighter than non-rugged models

Rugged model

Sunlight-resistant screen enables clear glare-free viewing!

Item	Specifications
Display	7" widescreen, TFT color LCD, 65536 colors
Resolution	WVGA
Backlight	White LED
Panel material	Aluminum
User memory	Memory for storage (ROM): 32 MB Memory for operation (RAM): 128 MB
Standard interface	Ethernet (2 ports), RS-232, RS-422/485 USB host (USB-A): 　1 channel (USB 2.0 (High-Speed 480 Mbps)) USB device (USB Mini-B): 　1 channel (USB 2.0 (High-Speed 480 Mbps)) Sound output interface (φ3.5 minijack), SD memory card interface
Extension interface	–
Wireless LAN communication unit interface	For installing a wireless LAN communication unit
Operating ambient temperature	-20 ˚C to 65 ˚C
Brightness (LCD panel)	1000 cd/m^2 (Typ)
UV cutoff	Approximately 95% (370 nm)
Protective structure	Front: IP66F, IP67F Inside control panel: IP2X
Vibration resistance	19.6 m/s^2 (continuous), 19.6 m/s^2 (intermittent)
Shock resistance	392 m/s^2 (40G)
Dedicated option	UV protective sheet, protective cover for oil, stand

Point!

UV resistant

Ultraviolet rays are cut by approximately 95% (370 nm) with a UV-cutting layer and UV-absorbing layer. Degradation of the LCD panel or touch panel caused by ultraviolet rays is reduced. Use the optional UV protection sheet to further improve resistance to ultraviolet rays.

Approx. 95% cut

Ultraviolet rays

UV-cutting layer

UV-absorbing layer
(PET film)

2

Hardware

Vibration and shock resistant

Since the structure of the front panel has been reinforced with a metal housing, the rugged model can be used in environments that are subject to vibration or shock, such as construction equipment or snow plows.

2x stronger than non-rugged models

■ GT25 rugged model external appearance [front face/rear face]

❶ GOT front face
The metal enclosure increases resistance against vibration and shock. Ultraviolet rays are cut by approximately 95% (370 nm). Also comply with IP66F and IP67F ratings.

❷ Ethernet interface (2 ports)
Use Ethernet to simultaneously connect up to four types of industrial devices from different manufacturers. CC-Link IE Field Network Basic compatible devices can also be connected.

❸ RS-422/485 interface
Connect to various industrial devices and barcode readers.

❹ RS-232 interface
Connect to various industrial devices, barcode readers and serial printers.

❺ Sound output interface (φ3.5 minijack)
Output sound by connecting φ3.5 stereo mini-plug (3-prong).

❻ USB interface: host (USB-A)
Transfer project data or read the data (logging data, etc.) to or from the GOT using the USB memory. A USB mouse, keyboard, barcode reader*, or RFID reader* can also be connected.
* USB keyboard (HID) compatible model only

❼ USB interface: device (USB Mini-B)
Connect to a personal computer and transfer data.

❽ SD memory card interface
Save large volumes of data, including alarms and logging data.

❾ Wireless LAN communication unit interface
Install a wireless LAN communication unit.

For details

GT25 open frame model

A new style of GOT2000

For the details of the GT25 open frame model, please refer to the Graphic Operation Terminal GOT2000 Series White & Open catalog (L(NA)08414ENG).

GOT complements machine design

Installing the GOT2000 from the back side of the control panel complements the machine-design surface.
Using a stainless-look environmental protection sheet allows the touch panel to blend into the production machines for the pharmaceutical and food industries.

Item	Specifications
Display	8.4"/10.4"/12.1", TFT color LCD, 65536 colors
Resolution	SVGA, VGA
Backlight	White LED
User memory	Memory for storage (ROM): 32 MB Memory for operation (RAM): 80 MB
Standard interface	Ethernet, RS-232, RS-422/485 USB host (USB-A): 1 channel (USB 2.0 (High-Speed 480 Mbps)) USB device (USB Mini-B): 1 channel (USB 2.0 (High-Speed 480 Mbps)) SD memory card interface
Extension interface	CC-Link IE TSN **NEW**, CC-Link IE Control, CC-Link IE Field, CC-Link, bus, MELSECNET/H
Side interface	For installing a wireless LAN communication unit

IP67F protection

To conform to IP67F, attach an environmental protection sheet.*
GOT can be operated with wet hands, wiped with a damp cloth, and washed with water.

* Note that the structure does not guarantee protection in all users' environments. The GOT may not be used in certain environments where it is subjected to splashing oil or chemicals for a long period of time or soaked in oil mist.

Suitable for pharmaceutical and food industries

Flush surface without any gaps and grooves prevents dust, dirt, and debris from accumulated on the edge.

Before   After

■ GT25 open frame model external appearance [front face/rear face]

❶ Touch panel
Using an environmental protection sheet (optional or prepared by the users) is required.

❷ Unit installation fitting
Fittings to install GOT to a panel are included.

❸ Extension interface
Communication and option units can be installed.

❹ Ethernet interface
Use Ethernet to simultaneously connect up to four types of industrial devices from different manufacturers. CC-Link IE Field Network Basic compatible devices can also be connected.

❺ RS-232 interface
Connect to various industrial devices, barcode readers and serial printers.

❻ RS-422/485 interface
Connect to various industrial devices and barcode readers.

❼ Side interface
Install a wireless LAN communication unit.

❽ SD memory card interface
Save large volumes of data, including alarms and logging data.

❾ USB interface: device (USB Mini-B)
Connect to a personal computer and transfer data.

❿ USB interface: host (USB-A)
Transfer project data or read the data (logging data, etc.) to or from the GOT using the USB memory. A USB mouse, keyboard, barcode reader*, or RFID reader* can also be connected.
* USB keyboard (HID) compatible model only

⓫ POWER LED
Check the power supply status.
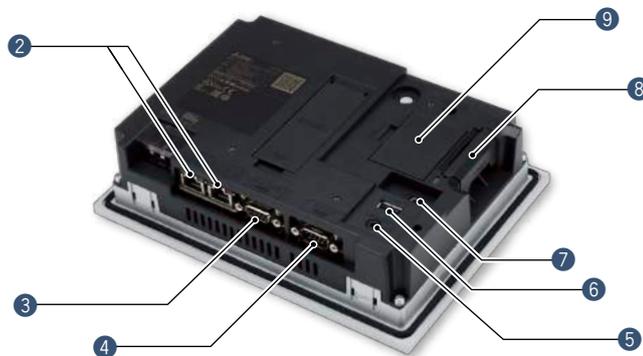
■ Easy installation

Adjustable to various panels

The installation fitting is adjustable from 1.5 mm to 4 mm of the control panel thickness. GOT can adjust the difference of the control panel thickness. Vertical installation is also available.

Installation fitting (panel thickness: 1.5 mm to 4 mm (0.06 inch to 0.16 inch))

Touch panel protected by mold

Designed for safe installation

The edge of the touch panel is protected to prevent damage to the touch panel or injury by touching the sharp edge. It is possible to safely install the GOT.

Designed for safe installation

Dedicated installation fittings

Attach appropriate installation fittings (vertical/horizontal) depending on the installation orientation.

Installation instructions

Environmental protection sheet*
Control panel surface
GOT
Stud*
Unit installation screw*
Unit installation fitting

* An environmental protection sheet (optional or prepared by the users), studs and screws (prepared by the users) are required separately.

17

GT23 model

Unchallenged cost performance

A wide variety of specifications suit every system design

Communication interfaces such as Ethernet, RS-232, RS-422/485, USB host/device and SD memory card are standard features. Advanced interactive features such as data logging, multi-channel communication, and FA transparent function are supported.

Item	Specifications
Display	8.4"/10.4", TFT color LCD, 65536 colors
Resolution	VGA
Backlight	White LED
User memory	Memory for storage (ROM): 9 MB Memory for operation (RAM): 9 MB
Standard interface	Ethernet, RS-232, RS-422/485 USB host (USB-A): 1 channel (USB 1.1 (Full-Speed 12 Mbps)) USB device (USB Mini-B): 1 channel (USB 1.1 (Full-Speed 12 Mbps)) SD memory card interface

Use the System Launcher function and quickly check the system status!

A graphical system configuration diagram indicates module statuses. When you touch a module the extended function list is shown and you can carry out maintenance work efficiently.

System configuration diagram

Icons show the module status. You can check the module with an error at a glance.

Extended functions menu

■ GT23 model external appearance [Standard model: front face/rear face]

❶ Simple design

The simple design with a linear motif is sleek and complements any machine design.

❷ Flat body

The front flat screen is easy to clean. (USB interface is on the back.)

❸ Ethernet interface

Use Ethernet to simultaneously connect up to two types of industrial devices from different manufacturers. CC-Link IE Field Network Basic compatible devices can also be connected.

❹ RS-232 interface

Connect to various industrial devices, barcode readers and serial printers.

❺ RS-422/485 interface

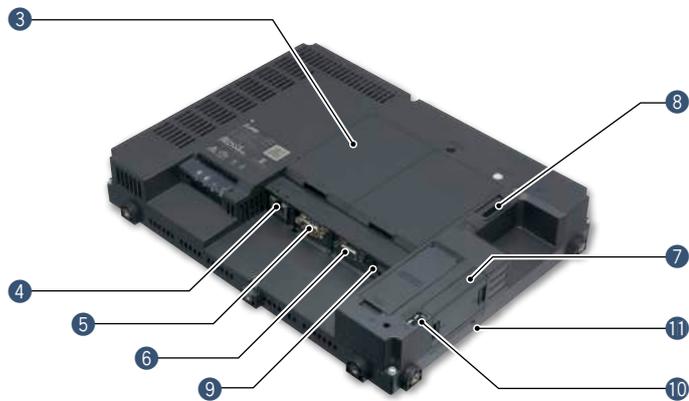Connect to various industrial devices and barcode readers.

❻ USB interface: device (USB Mini-B)

Connect to a personal computer and transfer data.

❼ USB interface: host (USB-A)

Transfer project data or read the data (logging data, etc.) to or from the GOT using the USB memory.
A USB mouse, keyboard, barcode reader*, or RFID reader* can also be connected.

* USB keyboard (HID) compatible model only

❽ SD memory card interface

Save large volumes of data, including alarms and logging data.

Easily collect log data and display it in graphs and lists

Use the GOT to collect data from the programmable controller and temperature controllers. The data can be displayed in graphs and lists. It can also be exported to a personal computer for further analysis. The logging data can be saved in the built-in SRAM even if the power fails.

Programmable controller

Temperature controller

Buffering area
(Memory in GOT)

Memory card, etc.

Analyze memory card data (CSV or Unicode® text files) with a personal computer.

Graph display

List display

Time	Temp.A	Temp.B	Temp.C	Cursor Position
16:00	22	20	23	03/07/18 16:20
16:05	21	20	22	
16:10	20	21	20	
16:15	20	23	23	
16:20	23	20	20	
16:25	22	21	22	

GT21 wide model

Expands possibilities of GT21 models

Smart silver

For the details of GT21 wide models,
please refer to the Graphic Operation Terminal
GOT2000 Series Wide Model catalog (L(NA)08461ENG).

Cool black

The highest resolution screen in the GT21 models, with various built-in interfaces

The GOT2000 wide models are available in a choice of silver and black. In addition to the high resolution display, 65536 colors of LCD improves quality of screen display.
The first GT21 model with the USB host enables you to connect a USB mouse and keyboard, or transfer data using a USB memory. In addition, Ethernet printers can be used.

Item	Specifications
Display	7" widescreen, TFT color LCD, 65536 colors
Resolution	WVGA
Backlight	White LED
User memory	Memory for storage (ROM): 15 MB
Standard interface	Ethernet, RS-232, RS-422/485 USB host (USB-A): 1 channel (USB 1.1 (Full-Speed 12 Mbps)) USB device (USB Mini-B): 1 channel (USB 1.1 (Full-Speed 12 Mbps)) SD memory card interface

Widescreen displays large amounts of information

High resolution WVGA screen has sufficient display area for long alarm messages.

5 times higher resolution greatly increases expressiveness

Standard GT1055-Q

QVGA 320 × 240 dots

Wide GT2107-W

WVGA 800 × 480 dots

2

Hardware

Remote monitoring provides wide access to application

Remote monitoring with the VNC server function is now available on GT21. By remotely connecting to GOT from personal computer or tablet, you can operate, monitor production equipment and connect to system devices.

* GT2107-W only among GT21 models.

Enhanced graphics

Outline fonts can now be used on GT21 model. Antialiasing smoothes out jagged text edges and displays clear characters, offering improved visibility of screen display.

* GT2107-W only among GT21 models.

Standard 16dot HQ Gothic

Happy

Wide Outline Gothic (antialiasing enabled)

Happy

Clear characters improves visibility

■ GT21 wide model external appearance [front face/rear face]

❶ USB interface: device (USB Mini-B)
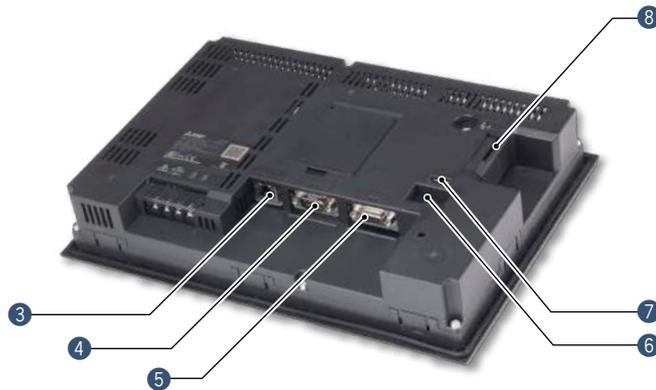Connect to a personal computer and transfer data.

❷ USB interface: host (USB-A)
Transfer project data or read the data (logging data, etc.) to or from the GOT using the USB memory. A USB mouse, keyboard, barcode reader*, or RFID reader* can also be connected.
* USB keyboard (HID) compatible model only

❸ Ethernet interface
Use Ethernet to simultaneously connect up to two types of industrial devices from different manufacturers. CC-Link IE Field Network Basic compatible devices can also be connected.

❹ RS-422/485 interface
Connect to various industrial devices and barcode readers.

❺ RS-232 interface
Connect to various industrial devices, barcode readers and serial printers.

❻ SD memory card interface
Save large volumes of data, including alarms and logging data.

GT21 model

■ GT2104-R

Compact model with exciting possibilities

Widescreen type compact model!

High resolution, 480 × 272 dot display realized in a compact body!

Item	Specifications
Display	4.3", TFT color LCD, 65536 colors
Resolution	480 × 272 dots
Backlight	White LED
User memory	Memory for storage (ROM): 9 MB
Standard interface	Ethernet, RS-232, RS-422/485 USB device (USB Mini-B): 1 channel (USB 1.1 (Full-Speed 12 Mbps)) SD memory card interface

Wide screen display fits a lot of data!

The wide model shows a large amount of information on a 65536 color display.

GT1045-QSBD

GT2104-RTBD

Resolution

1.5 times wider in horizontal direction

4.7 inch Screen size: 4.7 inch
Resolution: 320 × 240
Display color: 256 colors

4.3 inch Screen size: 4.3 inch
Resolution: 480 × 272
Display color: 65536 colors

■ GT2104-R external appearance [front face/rear face]

❶ **Simple design**
The simple design with a linear motif is sleek and complements any machine design.

❷ **Flat body**
The front flat screen is easy to clean. (USB interface is on the back.)

❸ **USB interface: device (USB Mini-B)**
Connect to a personal computer and transfer data.

❹ **Ethernet interface**
Use Ethernet to simultaneously connect up to two types of industrial devices from different manufacturers. CC-Link IE Field Network Basic compatible devices can also be connected.

❺ **RS-422/485 interface**
Connect to various industrial devices and barcode readers.

❻ **RS-232 interface**
Connect to various industrial devices, barcode readers and serial printers.

❼ **SD memory card interface**
Save large volumes of data, including alarms and logging data.

2

Hardware

■ GT2103-PMBD

Small screen, big possibilities

Small, compact, easy to operate!

Ethernet built into a compact body!
The intuitively understandable 5-color backlight offers choices of backlight color and backlight blink according to machine operation state.

Item	Specifications
Display	3.8", monochrome (black/white), 32 shade grayscale TFT LCD display
Resolution	320 × 128 dots
Backlight	5-color LED (white, green, pink, orange, red)
User memory	Memory for storage (ROM): 3 MB
Standard interface	Ethernet, RS-422/485 USB device (USB Mini-B): 1 channel (USB 1.1 (Full-Speed 12 Mbps))
Extension interface	For installing an SD memory card unit

High-definition LCD

GT2103 is equipped with an easy to see, compact high-resolution TFT LCD with 32 gray scales.

Same compact type, but so much clearer!

GT1020
Monochrome (black/white) STN LCD

GT2103
Monochrome TFT LCD with 32 gray scales

* Comparison of GT1020 and GT2103-P

SD memory card unit is available!

SD memory cards can be used when the optional SD memory card unit is attached.

SD memory card unit
GT21-03SDCD
Separate SD memory card is required.

■ GT2103-PMBD external appearance [rear face]

❶ **SD memory card unit interface**
Connect an optional SD memory card unit and save data including alarms and logging data.
* Excluding GT2103-PMBLS

❷ **USB interface: device (USB Mini-B)**
Connect to a personal computer and transfer data.

❸ **RS-422/485 interface**
Connect to various industrial devices and barcode readers.
* Excluding GT2103-PMBDS2
* RS-422 on GT2103-PMBLS (dedicated to FX connection)

❹ **Ethernet interface**
Use Ethernet to simultaneously connect up to two types of industrial devices from different manufacturers. CC-Link IE Field Network Basic compatible devices can also be connected.
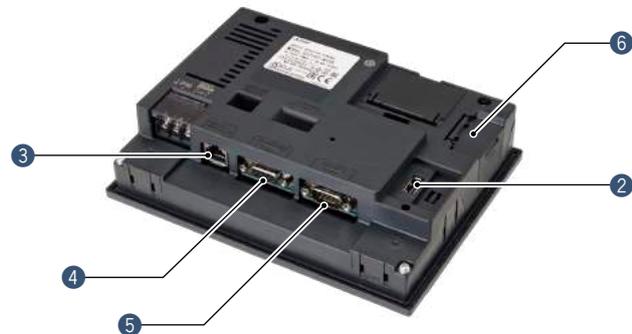* GT2103-PMBD only

2

Hardware

GOT SIMPLE

Simple models with various user friendly features

For details   Concept movie

10" widescreen GS2110-WTBD

7" widescreen GS2107-WTBD

Enhanced basic functions

WVGA screen has sufficient display area for long alarm messages or wide trend graph display.
Not only Mitsubishi Electric industrial devices, but also third-party industrial devices can be connected to enable monitoring of the equipment. In addition, Ethernet printers can be used. **NEW**

Item	Specifications
Display	7"/10", TFT color LCD, 65536 colors
Resolution	WVGA
Backlight	White LED
User memory	Memory for storage (ROM): 9 MB
Standard interface	Ethernet, RS-232, RS-422 USB device (USB Mini-B): 1 channel (USB 1.1 (Full-Speed 12 Mbps)) SD memory card interface

Easily exchange data with FTP

By using GOT, production results and alarm logs can be stored in an SD memory card of the GOT (FTP client) and sent to a personal computer (FTP server). The GOT can also receive the production instruction data from the personal computer.

Writing file from GOT to personal computer

Write to FTP server

Personal computer (FTP server)

Production results, alarm log

Production results, alarm log

Production results, alarm log

GOT SIMPLE (FTP client)

Reading file from personal computer to GOT

Retrieve file from FTP server

Personal computer (FTP server)

Production instruction data

Production instruction data

Production instruction data

GOT SIMPLE (FTP client)

Security with password management

Setting the operation authority and the viewing authority per operator achieves "enhanced security" and "prevention of improper operation". Operator authentication can be performed at startup and when the screen is switched.

Operation authorized → **Login OK** → Operation screen is displayed

Operation unauthorized → **Login failed** → Operation screen is not displayed

IP filter function

Registering the IP address of the device which can access the GOT restricts the access from unauthorized devices. Registering the IP address of the device to prohibit access is also possible.

Register the IP address of the device to allow access

GOT SIMPLE
Ethernet
Access not accepted
Allowed IP address   Unregistered IP address

Register the IP address of the device to prohibit access

GOT SIMPLE
Ethernet
Access not accepted
Prohibited IP address   Unregistered IP address

Backup important programs for safety in case of an error

Sequence programs can be replaced even without a personal computer. When the programs and parameters are backed up in GOT[*1], the data and machine operation can instantly be restored even if an unexpected failure occurs.

*1   A separate SD memory card is required.
*2   The target connection devices are QCPU, LCPU, FX5UCPU and FXCPU.

SD memory card

Backup →
← Restore

Programmable controller[*2]   GOT SIMPLE

■ GOT SIMPLE Series external appearance [front face/rear face]

GOTSIMPLE
Graphic Operation Terminal

❶ **GOT front face**
IP65F front face protection is useful for various production machines and facilities.
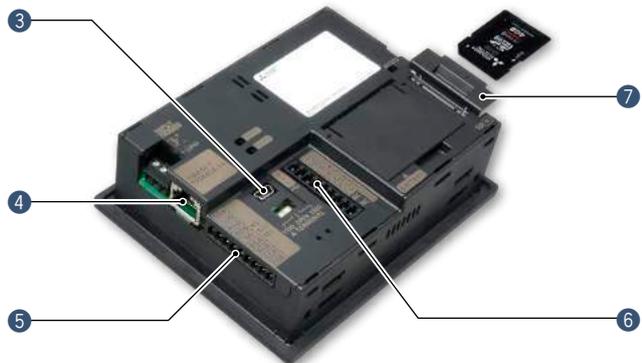
❷ **Ethernet interface**
Use Ethernet to simultaneously connect up to two types of industrial devices from different manufacturers. CC-Link IE Field Network Basic compatible devices can also be connected.

❸ **RS-232 interface**
Connect to various industrial devices, barcode readers and serial printers.

❹ **RS-422 interface**
Connect to various industrial devices and barcode readers.

❺ **USB interface: device (USB Mini-B)**
Connect to a personal computer and transfer data.

❻ **SD memory card interface**
Save large volumes of data, including alarms and logging data.

For details

GOT2000 compatible HMI software

GT SoftGOT 2000

Turn your personal computer or panel computer into GOT2000

For the details of GT SoftGOT2000, please refer to the GT SoftGOT2000 Solutions catalog (L(NA)08606ENG).

License key (for USB port)

High affinity with GOT2000 Series

Functions equivalent to the GOT2000 Series can be used in GT SoftGOT2000. The project data created with HMI/GOT Screen Design Software GT Works3 can be used by converting it into the GT SoftGOT2000 data.

▶ For the supported functions, see "Function list" on page 148.

Reuse project data

GOT2000

GT SoftGOT 2000

Same operability with GOT2000 Series

In addition to touch operations, long press can also be used. Using momentary switches and delay settings enables safe operation and improves operability.

MI3000 with GT SoftGOT 2000

▶ GT SoftGOT2000 is preinstalled on MELIPC MI3000. For the details, see page 184.

System configurations

GT SoftGOT2000 can be used in single channel connection that monitors one channel and in multi-channel connection that enables monitoring up to four channels of industrial devices. Select the connection type to match your system configuration.

| Single channel connection (GT SoftGOT2000) | Multi-channel connection (GT SoftGOT2000 (Multi-channel)) **NEW** |

Connectable in all communication types that are supported by GT SoftGOT2000.

GT SoftGOT 2000

Personal computer

Up to four online modules of GT SoftGOT2000 are recommended

Ethernet, serial, etc.   Channel 1

Programmable controller

Multi-channel connection is supported in Ethernet connection, connection with OPC UA servers, and microcomputer connection only. Up to four channels of industrial devices can be monitored on a single module of GT SoftGOT2000.

GT SoftGOT 2000

Personal computer

One online module of GT SoftGOT2000 is recommended

Ethernet   Channel 1   Channel 2   Channel 3   Channel 4

Third-party company programmable controller A

Third-party company programmable controller B

Third-party company programmable controller C

Mitsubishi Electric programmable controller

Connectable to OPC UA servers [NEW]

GT SoftGOT2000 accesses an OPC UA server as an OPC UA client.[1]

[1] To connect to OPC UA servers, installation of MELSOFT GT OPC UA Client software is required. To use the OPC UA client connection, use Windows® 7 OS or later. For more information about how to obtain the software, please contact your local sales office.

Access range

OPC UA server on the same personal computer

GT SoftGOT 2000

Read OPC UA tags/ Write tag values

OPC UA server

Ethernet

Read OPC UA tags/Write tag values

OPC UA server in the same network
MELSEC iQ-R OPC UA server

MELSOFT GT OPC UA Client software[1]

CC-Link IE

Edgecross interaction

Edgecross is the open software platform in Japan in the edge computing field that coordinates factory automation and IT systems. Edgecross analyzes and diagnoses data near the shop floor and enables real time feedback to the production, data collection, and sending or receiving data to/from facilities and equipment regardless of vendors and network types. The data collected by Edgecross can be easily visualized and analyzed using various functions such as trend graph display on GT SoftGOT2000.

Personal computer[1]

Real-time data processing
EDGECROSS

Data processing example
Extract only the necessary data for graph display

Visually check various data
GT SoftGOT 2000

Data read

Data write[2]

Data collection

Data write/ Feedback

CC-Link IE Data Collector

SLMP Data Collector

OPC UA Data Collector

MTConnect Data Collector

Processing machines, transfer machines, filling machines, packaging machines, mounting machines, etc.

[1] It is required to install Edgecross Basic Software, Data Collector, and GT SoftGOT2000 on a personal computer.
[2] To write data from GT SoftGOT2000 to Edgecross Basic Software, installation of MELSOFT GT OPC UA Client software is required separately.

Flexible resolution setting

The users can flexibly specify resolutions to change the screen size depending on the information device to use.

Minimum

640 to 1920 dots

480 to 1200 dots

Maximum

GT SoftGOT2000

The same screens as the on-site GOT can be monitored on an office computer (SoftGOT-GOT link function)

If GOT is used at the shop floor, GT SoftGOT2000 reads project data from the GOT via Ethernet, and uses the project data to monitor connected devices. There is no need to create project data dedicated for GT SoftGOT2000 and quick remote monitoring of industrial devices is enabled via Ethernet. Since GT SoftGOT2000 can also display a different screen from the one shown on the GOT at the shop floor, monitoring on GT SoftGOT2000 does not affect shop floor operation.

In addition, exclusive control of authorization is provided as standard to prevent simultaneous operations and ensure safe operation.

* SoftGOT-GOT link function is supported by GT27 and GT25. Not supported by GT23, GT21, and GS21.

GT SoftGOT2000 Commander makes monitoring work efficient

Point

When using the SoftGOT-GOT link function, GT SoftGOT2000 Commander can be used to collectively check the monitoring status of GT SoftGOT2000 modules, and start or stop monitoring of the modules.

* GT SoftGOT2000 Commander is a software included in GT Works3, the same as GT SoftGOT2000.

Effective usage when there are multiple GOTs that use the SoftGOT-GOT link function

The list shows which GT SoftGOT2000 module is linked to which GOT, and each monitoring status.
Since it is recommended to use up to four modules of GT SoftGOT2000 online simultaneously, after starting up 20 modules of the software, up to four modules can be set online and thus large-scale systems can be monitored efficiently.

Managing start/stop of monitoring is easy

Double-click the Comment column of each line to switch between Online and Offline, or between Not started and Online (Offline).
 - Online: during monitoring
 - Offline: stopped monitoring

Automatically search for GOTs to monitor

GOTs that can use the SoftGOT-GOT link function can be searched.

Building advanced systems

Windows® applications can be started up from GT SoftGOT2000.

The data of GT SoftGOT2000 internal devices can be read and written from the user-created applications. Interaction between GT SoftGOT2000 and user-created applications enables the users to control or manage data by own method.

* GD, GS, GB, SGB, or SGD internal devices can be used.
* For the supported applications, please refer to the GT SoftGOT2000 Version1 Operating Manual.

Personal computer

Interaction with other applications

Read internal device values

Create reports with Microsoft® Excel® by reading data collected by GT SoftGOT2000

User-created application/ Windows® application

GT SoftGOT 2000

Interaction

Write internal device values

Reflect the planned value changed on Microsoft® Excel® to GT SoftGOT2000

Microsoft® Excel® screen example

Point

Starting up other applications with a touch switch on the GT SoftGOT2000 screen

By creating a touch switch on the GT SoftGOT2000 screen in advance, it is possible to start other applications (such as Microsoft® Excel®) while monitoring GT SoftGOT2000. Interaction between equipment monitoring and personal computer applications makes monitoring work efficient.

Starting up Microsoft® Excel®

The data collected by GT SoftGOT2000 can be checked in a graph quickly.

GT SoftGOT 2000

Starting up GX Works3

MI3000 at the shop floor monitors sequence programs without bringing a laptop computer.

* GX Works3 should be installed in advance.

MI3000 with GT SoftGOT 2000

▶ For the details of MI3000, see page 184.

Automatic startup

By using scripts, other applications can be started automatically by setting conditions such as when an error occurs or specific device values. (GS devices are used to control the function.)

GOT Solutions INDEX

Your Solution

GOT2000
Graphic Operation Terminal

Security
Automation
Network
Factory
System

4

GOT Solutions INDEX

GOT Smart Web-based Remote Solutions

Monitor your worksite from a remote location

■ Can I check the equipment status from a remote location?

Worksite　⚠ Error!

Office

■ Can I check the situation without visiting the worksite?

Worksite

■ Can I view manuals and drawings in a personal computer in my office from the worksite?

I need to go to the office to get a PC to investigate the problem cause.

GOT offers various remote monitoring and operation functions that can be used for various applications depending on your needs. The GOT remote solutions increase efficiency in various applications from startup, adjustment, to maintenance using mobile devices and personal computers. The GOT2000 improves visualization accessibility and reduces total cost of ownership.

■ Comparison of remote maintenance functions

Item	Monitor or operate GOT or connected devices from a personal computer or tablet					Monitor a personal computer from GOT
	GOT Mobile function P.34	iQ Monozukuri ANDON Upgraded P.35	iQ Monozukuri Process Remote Monitoring NEW P.36	VNC server function P.37	SoftGOT-GOT link function P.38	Remote personal computer operation function (Ethernet) P.39
Number of simultaneous connections from clients	○ Maximum 5	—		× Simultaneous connection prohibited (1 to 1 only)	○ Maximum 7*1	—
Monitor a different screen on each client	○	—		× Always monitor the same screen as on GOT	△ *2	—
Drawing performance	○		○	△	○	—
Viewing application	Web browser (Google Chrome, Safari)		GT SoftGOT2000 (license key required separately)	VNC viewer (freeware*3)	GT SoftGOT2000 (license key required separately)	—
Required options	License (register on GOT)		License (register on PC), License key (attach to PC)	License (register on GOT)	License key (attach to PC)	License (register on GOT)
Authorization exclusive control	○		○	○	○	—
Screen display — Supported objects (touch switch, etc.)	△ Some functions are different from GOT		○ Same as GOT	○ Same as GOT	○ Same as GOT	—
Screen display — Monitoring functions (sequence program monitor, etc.)	× Not supported		× Not supported	○ Same as GOT	× Not supported	—

*1 When using the GOT network interaction function, multiple clients can be connected simultaneously. Note that restrictions exist depending on the connection type between GOT and the connected device.

*2 When a GOT internal device is used as the screen switching device, each client can display a different screen.

*3 For the VNC client software that can be used, please refer to the Technical Bulletin GOT-A-0069 on the Mitsubishi Electric Factory Automation Global website (www.MitsubishiElectric.com/fa/).

Safety precautions
When the GOT Mobile function, the VNC Server function, the SoftGOT-GOT link function, the remote personal computer operation function (Ethernet), or iQ Monozukuri products is used to perform remote control of control equipment, the field operator may not notice the remote control, possibly leading to an accident. In addition, a communication delay or interruption may occur depending on the network environment, and remote control of control equipment cannot be performed normally in some cases. Before using these functions to perform remote control, fully grasp the circumstances of the field site and ensure safety.

■ Use GOT remote functions effectively in your worksites

■ Monitor and operate GOT from multiple remote locations

▶ GOT Mobile function   34
▶ SoftGOT-GOT link function   38

■ Implement the ANDON system easily

▶ GOT Mobile function   34
▶ iQ Monozukuri ANDON   Upgraded 35

■ Check the data in a PC in your office from the worksite

▶ Remote personal computer operation function (Ethernet)   39

■ Monitor GOT at high speed

▶ GOT Mobile function   34
▶ SoftGOT-GOT link function   38

Office

■ Create remote monitoring screens without extra efforts

▶ VNC server function   37
▶ SoftGOT-GOT link function   38

■ Use various monitoring functions remotely (sequence program monitor, etc.)

▶ VNC server function   37

■ Monitor and operate GOT using different screens depending on the information device

▶ GOT Mobile function   34

■ Manage information of multiple devices

▶ iQ Monozukuri Process Remote Monitoring   NEW   36

4

GOT Solutions - GOT Smart Web-based Remote Solutions

GOT Mobile

Monitor your worksite from a remote location

Support system operation

■ GOT Mobile function

Having problems?	GOT will solve your problems!

Check the status of the worksite using a web browser.

Worksite

Outside of the clean room

An error occurred. How do I deal with it?

From a remote location

What is the problem cause?

From your office

Other usage

What's the progress? Any problems?

10000
2106
21%

PC + large screen monitor

On a large screen

Up to five operators

Equipment A has an error

Monitor production with one PC

Can I check the equipment status from a remote location?

Check the equipment status using a web browser on tablets from a remote location. Up to five information devices can simultaneously access a single GOT so that you can view and operate a different screen on each device.

* Up to five clients can connect to one GOT at the same time.

Function features

Via GOT at the worksite, connected devices can be monitored from computers and tablets in a remote location.
* A separate license (GT25-WEBSKEY) is required.

Safe with security and exclusive control

Exclusive control of authorization prevents accidents that might be caused by simultaneous operations in the same network. (GOT network interaction[1]) Set passwords to control monitoring and operation. [1] For the details, please refer to page 38.

GOT2000 Series
GOT Mobile Function
Application Examples
(L(NA)08464ENG).

Simultaneous monitoring from five information devices

Worksite

Ethernet

GOT + Wireless LAN communication unit[1][2] or Wireless LAN access point Tablet

Personal computer + large screen monitor

Personal computer

Remote location or office

Smartphone   Tablet

*1 The wireless LAN communication unit cannot be used with GT2505. An access point is required separately.
*2 For the countries where the unit can be used and other details, please refer to page 76.

Flexibly design screens depending on the device
* Maximum 3000 × 3000 dots

10000
2106
21%

Smartphone size   Tablet size   PC size   Full HD size

Specification details and restrictions   * For the necessary option devices, please refer to the "Function list" (page 148).

● **Objects, figures, functions that can be used with the GOT Mobile function**   There are some restrictions on the objects, figures, and functions that can be used on information devices such as tablets. For the details, please refer to the relevant product manual.
● **Precautions for the GOT Mobile function**   Please refer to the Technical Bulletin No. GOT-A-0090 on the Mitsubishi Electric Factory Automation Global website (**www.MitsubishiElectric.com/fa/**).
● **Peripheral devices**   For the VPN connection and the peripheral devices compatible with other Mitsubishi industrial devices, please contact your local sales office.

Recommended industries

Automotive	SEMICON, LCD	Electronics
F & B	Pharma	Plant

Supported GOT types

GT27	GT25	GT23
GT21	GS21	SoftGOT

Supported devices

PLC	Servo	Inverter
	Robot	CNC

Implement the ANDON system easily

Upgraded

■ iQ Monozukuri ANDON

iQ Monozukuri

Support system design

Support system operation

Having problems?	GOT will solve your problems!

Worksite

The operating instruction monitor displays the operation procedure (Web browser)

The ANDON monitor displays plans and results (Web browser)

GOT2000 (Web server)

Office

A tablet displays equipment alarms (Web browser)

A personal computer at the office displays production equipment of the line (Web browser)

Can I implement the ANDON system at low cost and visualize the worksite?

iQ Monozukuri ANDON is a simple ANDON* package that easily enables visualization of production sites using GOT2000 and a general-purpose web browser. Information obtained from production equipment is displayed on the monitor for ANDON via GOT2000, allowing sharing of the production site information to enable visualization.

* ANDON system visualizes information (production status, alarms) that is obtained from production equipment, sharing the information among site workers, a manager, and a maintenance personnel.

Function features

If you have equipment that can be connected to GOT2000, an ANDON system can be configured easily.
The dedicated setting tool (Contents Publisher) allows you to set/change the display of ANDON screens even without programming knowledge for configuring the ANDON system.
* iQ Monozukuri ANDON package is required separately.

Monitoring multiple devices with DB (database) mode NEW

The production information of multiple lines is collected in real-time in ANDON DB (database), and displayed on the ANDON monitor by transferring the data via GOT.

Concept movie

For more details, please refer to the iQ Monozukuri ANDON catalog (L(NA)08487ENG).

System configuration example*1

iQ Monozukuri ANDON package*2
❶ Contents Publisher
❷ Project file of the GOT for iQ Monozukuri ANDON (template screens)
❸ GOT Mobile function license
❹ License for iQ Monozukuri ANDON

HMI/GOT Screen Design Software MELSOFT GT Works3

Personal computer for ANDON

Personal computer (OS: Windows®) Contents Publisher (Create production plan and others)

Monitor for ANDON (Web browser)

Switching hub

Wireless LAN access point or

GOT2000 (GT27, GT25) (Web server)

Wireless LAN communication unit *3 *4

Tablet (Web browser)

Industrial devices

SD memory card

*1 The system configuration of the DB (database) mode differs from this example. For the details, please refer to the catalog on the left.
*2 Used by transferring to a personal computer, GOT2000 or an SD memory card.
*3 The wireless LAN communication unit cannot be used with GT2505. An access point is required separately.
*4 For the countries where the unit can be used and other details, please refer to page 76.

Recommended industries

Automotive	SEMICON, LCD	Electronics
F & B	Pharma	Plant

Supported GOT types

GT27	GT25	GT23
GT21	GS21	SoftGOT

Supported devices

PLC	Servo	Inverter
	Robot	CNC

Easily monitor multiple devices from a remote office

NEW

Support system operation

iQ **Monozukuri**

■ iQ Monozukuri Process Remote Monitoring

Having problems?

Third-party company programmable controller A

Mitsubishi Electric programmable controller

Third-party company programmable controller B

How can I effectively use the information separately stored in each device?

GOT will solve your problems!

Personal computer or MELIPC MI3000

Collected data is displayed in a list or chart

Camera and on-site GOT images are displayed

HUB

Network camera

Equipment 1   Equipment 2   . . .   Equipment 50

Manufacturing process and productivity of the whole production can be improved by analyzing the data aggregated and visualized on GT SoftGOT2000. The operation status of the shop floor and the information such as operation logs and alarms can be collected from each equipment via an on-site GOT.

Function features

IoT technologies can be easily introduced to the shop floor, and the information of multiple equipment can be collected, visualized, and managed collectively. The template project for GT SoftGOT2000 makes it easy to startup systems.
In addition, a dedicated setting tool (Process Remote Monitoring setting tool) can be used to collectively manage (read/edit/write) the information of operators registered on on-site GOTs.

Concept movie

For more details, please refer to the iQ Monozukuri Process Remote Monitoring catalog (L(NA)08674ENG).

Displaying graphs   Displaying efficiency visually

GT *SoftGOT* **2000**

Displaying a list

Process Remote Monitoring setting tool

Collecting information from on-site GOTs

Writing data to on-site GOTs

Up to 50 GOTs*1

*1   Up to five GOTs can be managed for each license. To manage information of 50 GOTs, purchase the product including 10 licenses.

Recommended industries

Automotive	SEMICON, LCD	Electronics
F & B	Pharma	Plant

Supported GOT types

GT27	GT25	GT23
GT21*	GS21	SoftGOT

* Supported only by the models equipped with an Ethernet port.

Supported devices

PLC	Servo	Inverter
	Robot	CNC

Operate the GOT from a remote PC or tablet

Support system operation

■ VNC server function

Having problems?	GOT will solve your problems!
Worksite ⚠ **Error!** Office	Office Worksite
	Worksite **Inside clean room** Operate on the GOT **Outside clean room** Operate the GOT with a tablet terminal

A problem occurred at the worksite in a remote location. Can I check the situation without visiting the worksite?

You do not need to visit the worksite. Monitor and operate the GOT from a remote location, and you can take corrective actions quickly.
* One client can connect to one GOT at the same time.

Function features

Remotely view and operate the GOT screen from information devices such as a personal computer and tablet. No dedicated screens are required.
* A separate license (GT25-VNCSKEY) is required.
* Supported by GT2107-W only among GT21 models.

Same operations as GOT

Utility functions including the sequence program monitor and the network monitor are also supported on computers and tablets.

Safe with security and exclusive control

Exclusive control of authorization prevents accidents that might be caused by simultaneous operations in the same network. (GOT network interaction*) Set passwords to control monitoring and operation. * For the details, please refer to page 38.

Worksite

Worksite

VNC server function license key GT25-VNCSKEY

Wireless LAN access point*1

Ethernet   Ethernet

Worksite
Tablet or mobile terminal!
OS: Android™ iOS

Office
Personal computer!
OS: Windows®

*1 No access point is required separately when installing the wireless LAN communication unit on the GOT. (Access point mode is supported by GT Works3 Ver.1.144A or later)
Note that the wireless LAN communication unit cannot be used with GT2505 and GT2107-W. For the countries where the unit can be used and other details, please refer to page 76.

Specification details and restrictions   * For the necessary option devices, please refer to the "Function list" (page 148).

● **Applicable VNC client software**   Please refer to the Technical Bulletin No. GOT-A-0069 on the Mitsubishi Electric Factory Automation Global website (**www.MitsubishiElectric.com/fa/**).

● **Peripheral devices**   For the VPN connection and the peripheral devices compatible with other Mitsubishi Electric industrial devices, please contact your local sales office.

Recommended industries

Automotive	SEMICON, LCD	Electronics
F & B	Pharma	Plant

Supported GOT types

GT27	GT25	GT23
GT21*	GS21	SoftGOT

* GT2107-W only. For the details, refer to the function descriptions above.

Supported devices

PLC	Servo	Inverter
	Robot	CNC

4

GOT Solutions - GOT Smart Web-based Remote Solutions

37

Remote monitoring with SoftGOT

Support system operation

■ SoftGOT-GOT link function

Having problems?	GOT will solve your problems!

Worksite

⚠ Error!

Office

A problem occurred at the worksite. Can I check the situation in my office?

GT SoftGOT 2000

Monitor the onsite GOT screen with GT SoftGOT2000

Office

Ethernet   Monitor (Ethernet connection)

Worksite

Project data

RCPU/QCPU/LCPU OMRON programmable controller

GOT

Without creating screens for remote monitoring, check the worksite on GT SoftGOT2000 by reading project data from GOT at the worksite.

Function features

Read project data from the GOT connected to GT SoftGOT2000 via Ethernet, and you can monitor the devices that are connected to the GOT on different screens from the one shown on the GOT.

* A separate license key (GT27-SGTKEY-U) is required.

Safe with security and exclusive control

Exclusive control of authorization prevents accidents that might be caused by simultaneous operations in the same network. The exclusive control can be enabled/disabled for each screen. (GOT network interaction)
Set passwords to the GOT project data and prevent invalid access.

GOT network interaction

Displaying an exclusive control target screen

With operating authority
◎ Input operations enabled

GT SoftGOT 2000

Displaying an exclusive control target screen

× Input operations disabled

Tablet

Ethernet

RCPU/QCPU/LCPU OMRON programmable controller

GOT
× Input operations disabled

Displaying an exclusive control target screen

GOT
◎ Input operations enabled

Displaying a screen which is not the exclusive control target

RCPU/QCPU/LCPU

Specification details and restrictions   * For the necessary option devices, please refer to the "Function list" (page 148).

● **Various peripherals** RCPU, QCPU, LCPU, OMRON programmable controller, MELIPC, CNC C70, robot controller (F Series (CR750-Q, CR751-Q, CR750-D, CR751-D), SQ Series (CRnQ-700 (Q172DRCPU)), SD Series (CRnD-700), FR Series (CR800-Q (Q172DSRCPU)))

● **Functions that can be used in GT SoftGOT2000** In GT SoftGOT2000, some functions available in GOT2000 series cannot be used. For the details, please refer to the relevant product manual.

Recommended industries

Automotive	SEMICON, LCD	Electronics
F & B	Pharma	Plant

Supported GOT types

GT27	GT25	GT23
GT21	GS21	SoftGOT

Supported devices

PLC	Servo	Inverter
	Robot	CNC

Operate the PC from a remote GOT

Support system operation

■ Remote personal computer operation function (Ethernet)

Having problems?	GOT will solve your problems!

Office

Worksite

Worksite   **Operate a personal computer from the GOT!**

Office

Ethernet

How can I view manuals and drawings in a personal computer in my office from the worksite?

On GOT at the worksite, you can operate a personal computer in a remote location and view manuals and drawings in the computer.

Function features

Connect GOT at the worksite to a personal computer in a remote location via Ethernet. This allows you to remotely operate the personal computer and view manuals and access the web browser on the computer.
* A separate license (GT25-PCRAKEY) is required.

Connecting a USB mouse/keyboard to the front (or rear) USB interface makes it easier to operate the personal computer.

Worksite

Office

Display personal computer screen

Personal computer screen

Personal computer screen

Ethernet

Operate mouse/keyboard

USB hub

USB mouse

USB keyboard

Recommended industries	Supported GOT types		Supported devices	
Electronics **F & B** **Plant**	**GT27** **GT25** GT23		**PLC** **Servo** **Inverter**	
	GT21 GS21 SoftGOT		**Robot** **CNC**	

4

GOT Solutions - GOT Smart Web-based Remote Solutions

GOT Easy Drive Control (Servo) Interactive Solutions

MITSUBISHI GRAPHIC OPERATION TERMINAL

GOT2000

MITSUBISHI SERVO AMPLIFIERS & MOTORS

+ MELSERVO-J4

Designed to suit your application and improve maintenance

For the details, please refer to the GOT2000 Drive Control (Servo) Interactive Solutions catalog (L(NA)08335ENG).

GOT *Drive*

GOT2000 Series Drive Control Interactive Solutions Movie ▶

■ GOT and servo system configurations

System configuration — CASE 1

GOT2000

RS-422

Programmable controller
MELSEC iQ-R
MELSEC iQ-F
MELSEC-Q
MELSEC-L
MELSEC-F
+
Positioning module

Servo amplifier
MR-J4-A(-RJ)
MR-JE-A

Station 1   Station 2

Pulse train

■ System configuration features
• Command interface: pulse train
• Control mode: positioning control
• Program: sequence program (ladder)
• Max. number of control axes: 1/2/4/8/32 axes

* Cannot be used in the MR-J3 compatible mode.

System configuration — CASE 2

GOT2000
GT SoftGOT2000

Serial,
Ethernet, etc.

Simple Motion module
(RD77MS/QD77MS/LD77MS/
FX5-80SSC-S/FX5-40SSC-S)

Servo amplifier
MR-J4-B(-RJ)
MR-J4W2-B
MR-J4W3-B
MR-JE-B

Axis 1   Axis 2

SSCNET III/H
SERVO SYSTEM CONTROLLER NETWORK

■ System configuration features
• Command interface: SSCNET III/H
• Control mode: positioning control, synchronous control, speed control, torque control, tightening & press-fit control, cam control
• Program: sequence program (ladder)
• Max. number of control axes: 2/4/8/16 axes

* Cannot be used in the MR-J3 compatible mode.

GOT Drive

■ GOT and servo system configurations

System configuration — CASE 3

GOT2000
GT SoftGOT2000

Serial,
Ethernet, etc.

Motion controller
(R64MTCPU/R32MTCPU/R16MTCPU/
Q17nDSCPU/Q170MSCPU(-S1))

Servo amplifier
MR-J4-B(-RJ)
MR-J4W2-B
MR-J4W3-B

Axis 1   Axis 2

SSCNET III/H
SERVO SYSTEM CONTROLLER NETWORK

■ System configuration features

- Command interface: SSCNET III/H
- Control mode: positioning control, synchronous control, speed control, torque control, tightening & press-fit control, cam control
- Program: motion program (SFC)
- Max. number of control axes: 16/32/64 axes

* Cannot be used in the MR-J3 compatible mode.

System configuration — CASE 4

GOT2000

Serial,
Ethernet, etc.

CC-Link IE Field Network Simple Motion module
(RD77GF/QD77GF)
* Supported in the motion mode and I/O mode.

Master/local module
(iQ-R/Q/LCPU) * Supported in the I/O mode.

CC-Link IE embedded CPU module
(RnENCPU) * Supported in the I/O mode.

CC-Link IE embedded Ethernet module
RJ71EN71

Servo amplifier
MR-J4-GF(-RJ)

Station 1   Station 2

CC-Link IE Field

■ System configuration features

- Command interface: CC-Link IE Field Network
- Control mode: positioning control, synchronous control, speed control, torque control, cam control
- Program: sequence program (ladder)
- Max. number of control axes: 4/8/16/32 axes

System configuration — CASE 5

GOT2000

Ethernet

Programmable controller
MELSEC iQ-R
MELSEC iQ-F
MELSEC-Q
MELSEC-L
MELSEC-F
+
Positioning module

Servo amplifier
MR-JE-C

Station 1   Station 2

Pulse train

■ System configuration features

- Command interface: pulse train
- Control mode: positioning control, speed control, torque control
- Program: sequence program (ladder)
- Max. number of control axes: 1/2/4/8 axes

The GOT2000 provides advanced functionality and improves connectivity with Mitsubishi servo systems. It provides some functions of MR Configurator2 (supporting MR-J4).
The GOT Drive enhanced functionality is designed to eliminate need for additional hardware, software and suits customers' applications to speed up system startup, improve maintenance and troubleshooting.

GOT Solutions

■ Drive control interactive functions and supported models (GT Works3 Ver.1.225K)

Supported drive control interactive functions differ depending on the system configuration.
Please refer to the following list.

Function name		Page	GOT supported models					Supported system configuration — CASE 1					
			GT 27	GT 25	GT 23	GT 21/ GS 21	GT Soft GOT 2000*7	MR-J4-A(-RJ) Function available	Sample screen*1*9	Dedicated screen*2	MR-JE-A Function available	Sample screen*1	Dedicated screen*2
Startup, adjustment	Parameter setting — Basic setting parameters	—	○	○	○	○	○	○	●	◎*5	○	×	×
	Gain/Filter parameters	—	○	○	○	○	○	○	●	◎*5	○	×	×
	Extension setting 1 parameters	—	○	○	○	○	○	○	●	◎*5	○	×	×
	Extension setting 2 parameters	—	○	○	○	○	○	○	●	◎*5	○	×	×
	Extension setting 3 parameters	—	○	○	○	○	○	○	●	◎*5	○	×	×
	I/O setting parameters	—	○	○	○	○	○	○	●	◎*5	○	×	×
	Linear servo/DD motor setting	—	○	○	○	○	○	○	●	◎*5	—	—	—
	Point table	—	○	○	○	○	×	○ MR-J4-A-RJ only	● MR-J4-A-RJ only	—	○	×	—
	Test operation — JOG operation	—	○	○	○	○	○	○	●	◎*5	○	×	×
	Positioning operation	—	○	○	○	○	○	○	●	◎*5	○	×	×
	Output signal (DO) forced output	—	○	○	○	○	○	○	●	△*5	○	×	×
	Adjustment — One-touch tuning function	P.48	○	○	○	○	○	○	●	—	○	×	—
	Tuning function	P.48	○	○	○	○	○	○	●	—	○	×	—
	Servo amplifier graph function [NEW]	P.45	○	○	×	×	×	×	—	×	×	—	×
	FA transparent function*4	—	○	○	○	×	—	—	—	—	—	—	—
Maintenance	Troubleshooting — System launcher (servo network) function	P.49	○	○	×	×	×	—	—	—	—	—	—
	Drive recorder function	P.44	○	○	×	×	×	×	—	×	×	—	×
	Servo amplifier graph function [NEW]	P.45	○	○	×	×	×	×	—	×	×	—	×
	Backup/Restoration function	—	○	○	○	×	×	×	—	—	×	—	—
	Operation monitor	—	○	○	○	○	○	○	●	△*5	○	×	×
	Power monitor	P.50	○	○	○	○	○	○	●	—	○	×	—
	Input/output monitor	—	○	○	○	○	○	○	●	△*5	○	×	×
	R motion monitor function*4	P.52	○	○	×	×	×	—	—	—	—	—	—
	Q motion monitor function*4	P.52	○	○	×	×	×	—	—	—	—	—	—
	Motion SFC monitor function*4	P.53	○	○	×	×	×	—	—	—	—	—	—
	Motion program editor function [NEW]	P.54	○	○	×	×	×	—	—	—	—	—	—
	Servo amplifier monitor function	P.51	○	○	×	△	×	○	●	◎	×	×	×
	Intelligent module monitor function*4	P.52	○	○	×	×	×	○*3	—	◎	○*3	—	◎
	Alarm display function	P.50	○	○	○	○	○	○	●	—	○	×	—
	Predictive maintenance — Machine diagnosis function	P.46	○	○	○	○	○	○	●	—	○	×	—
	Failure prediction function	—	○	○	○	○	×	—	—	—	—	—	—
	Switching axis numbers (station numbers) of servo amplifiers	—	○	○	○	○	○	○	●	—	○	×	—
	Servo amplifier life diagnosis function	P.47	○	○	○	○	○	○	●	—	○	×	—
Screen design	Utilizing screen data	—	○	○	○	○	○	○	—	—	○	—	—
GOT Drive Plus (paid template screens) [NEW]		P.55	○	○	×	×	×	—	—	—	—	—	—

*1 The sample screen is the project data that is included in GT Works3 (Ver.1.225K). Sample screens are not supported by GT23.
*2 The dedicated screen is the screen that is provided as the extended function of GOT; therefore there is no need for the users to create the screen.
*3 In the system configuration of CASE 1 (page 40) and CASE 5 (page 41), the function can be used by adding wiring between GOT and programmable controller.
*4 The supported version of GT Works3 differs depending on the type of connected device (CPU, intelligent function module).
*5 Parameters of the function can be monitored by using the servo amplifier monitor function in the dedicated screen.
*6 Usable when the GOT and the programmable controller (iQ-R only) are connected via Ethernet, and the programmable controller and the servo amplifier are connected via the CC-Link IE Field Network.

GOT Drive

●: Sample screens available ◎: Dedicated screens available ○: Function supported △: Partially supported —: Not applicable ×: Not supported

Supported system configuration											
CASE 2/CASE 3			CASE 2			CASE 4 NEW			CASE 5 NEW		
MR-J4-B(-RJ) MR-J4-W2-B MR-J4-W3-B			MR-JE-B			MR-J4-GF(-RJ)			MR-JE-C		
Function available	Sample screen*1*9	Dedicated screen*2	Function available	Sample screen*1*10	Dedicated screen*2	Function available	Sample screen*1	Dedicated screen*2	Function available	Sample screen*1	Dedicated screen*2
○	●	—	○	●	—	○	×	—	○	×	—
○	●	—	○	●	—	○	×	—	○	×	—
○	●	—	○	●	—	○	×	—	○	×	—
○	●	—	○	●	—	○	×	—	○	×	—
○	●	—	○	●	—	○	×	—	○	×	—
○	●	—	○	●	—	○	×	—	○	×	—
○	●	—	—	—	—	○	×	—	—	—	—
—	—	—	—	—	—	○	×	—	—	—	—
○	●	—	○	●	—	○	×	—	○	×	—
○	●	—	○	●	—	○	×	—	○	×	—
○	●	—	○	●	—	○	×	—	○	×	—
○	●	—	○	●	—	○	×	—	○	×	—
○	●	—	○	●	—	○	×	—	○	×	—
○	—	◎	○	—	◎	×	—	×	×	—	×
○	—	—	○	—	—	—	—	—	—	—	—
○	—	◎	○	—	◎	—	—	—	—	—	—
○	—	◎	○	—	◎	○	—	◎	×	—	×
○	—	◎	○	—	◎	×	—	×	×	—	×
○*8	—	—	×	—	—	○*6 MR-J4-GF only	—	—	×	—	—
○	●	—	○	●	—	○	×	—	○	×	—
○	●	—	○	●	—	○	×	—	○	×	—
○	●	—	○	●	—	○	×	—	○	×	—
○*8	—	◎	—	—	—	—	—	—	—	—	—
○*8	—	◎	—	—	—	—	—	—	—	—	—
○*8	—	◎	—	—	—	—	—	—	—	—	—
○*8	—	◎	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
○	—	◎	○	—	◎	○	—	◎	○*3	—	◎
○	●	—	○	●	—	○	×	—	○	×	—
○	●	—	○	●	—	○	×	—	○	×	—
—	—	—	—	—	—	○	×	—	—	—	—
○	●	—	○	×	—	○	×	—	○	×	—
○	●	—	○	●	—	○	×	—	○	×	—
○	—	—	○	—	—	○	—	—	○	—	—
○	●(Template)	—	—	—	—	—	—	—	—	—	—

*7 Supported by using GT Works3 version 1.160S or later. GT SoftGOT2000 can be used in the system configuration of CASE 2 (page 40) and CASE 3 (page 41).
*8 The function can be used in the system configuration of CASE 3 (page 41).
*9 Sample screens are available for GT27**-V (640 × 480) and GT2104-R (480 × 272) only. The data can be used for GOTs with different resolutions by changing the GOT type.
*10 Sample screens are available for GT27**-V (640 × 480) only. The data can be used for GOTs with different resolutions by changing the GOT type.

4

GOT Solutions - GOT Easy Drive Control (Servo) Interactive Solutions

Check the servo amplifier data on GOT when an alarm occurs

GOT Drive

Support maintenance work

■ Drive recorder function

Having problems?

I need to go to the office to get a PC to investigate the cause of the problem.

In case of a system failure, is there a simple and quick way to check the problem cause?

GOT will solve your problems!

GOT2000

Drive recorder information list screen

Check graph waveform from the alarm list!

Graph waveform screen

Servo data such as motor current and position command before and after the alarm occurrence can be read from the servo amplifier and displayed in a waveform or a list form.

Function features

GOT can be used to display the screen equivalent to the drive recorder of MR Configurator2.
Easily check the servo data (motor current, position command, etc.) on GOT without using a personal computer. The servo data can be stored on the GOT's SD memory card or USB memory.
After obtaining the servo data, you can send it to an office in a remote location and quickly solve the problem.

Worksite

Office

MR Configurator2

Servo amplifier
MR-J4-□B(-RJ)
MR-J4W2-□B
MR-J4W3-□B

Remote office

SSCNET III/H
SERVO SYSTEM CONTROLLER NETWORK

MR Configurator2

Specification details and restrictions   * For the necessary option devices, please refer to the "Function list" (page 148).

● **Target models**   MELSERVO-J4 Series (MR-J4-□B(-RJ), MR-J4W2-□B, MR-J4W3-□B, MR-J4-□GF(-RJ)), MELSERVO-JE Series (MR-JE-□B)
● **Supported connection types***1   Connection via motion controller/Simple Motion module
*1 For the details of connectable models of each connection type, please refer to the "Connectable model list" (page 152).
● **How to obtain sample screens**   The switch to start the drive recorder function has been added to the sample screen. Sample screens are included in GT Works3.
For the details, please contact your local sales office. The sample screens are supported by the following GT Works3 versions.
MR-J4-□B(-RJ), MR-J4W2-□B, MR-J4W3-□B: Ver.1.155M or later.

Recommended industries

| Automotive | Electronics | F & B |
| Pharma | | |

Supported GOT types

| GT27 | GT25 | GT23 |
| GT21 | GS21 | SoftGOT |

Supported devices

| PLC | Servo | Inverter |
| Robot | CNC | |

4

GOT Solutions - GOT Easy Drive Control (Servo) Interactive Solutions

Support startup and maintenance of servo systems

GOT Drive

NEW

■ Servo amplifier graph function

Support maintenance work

Having problems?	GOT will solve your problems!

If waveform data can be checked and adjusted on GOT, you do not need to bring a PC.

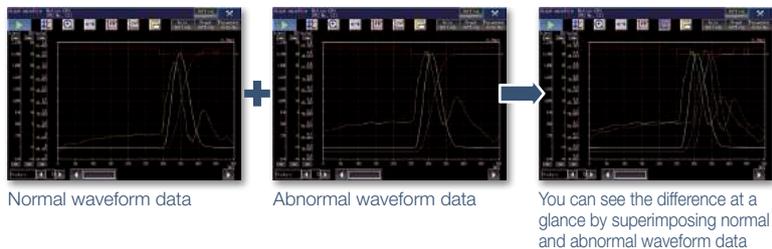Can I adjust gains while checking the waveform data at the worksite?

Servo amplifier graph waveform

The data of each axis (speed, torque values, etc.) are shown in up to 64 lines in a graph using a window screen on a user-created screen.

The servo amplifier graph function visualizes changes in operation of the equipment due to gain adjustment. Without using a personal computer, you can adjust gains and check parameter information efficiently.

Function features

Since gain adjustment and parameters check can be performed without using a personal computer, servo systems can be started up efficiently. Superimposing normal and abnormal waveform data and analyzing them helps in equipment maintenance.

Displaying waveform data item names

By checking item names of waveform data while viewing the graph waveform screen, problems can be identified quickly.

Normal waveform data   Abnormal waveform data   You can see the difference at a glance by superimposing normal and abnormal waveform data

Analyze the waveform data of a servo amplifier

In the servo amplifier graph function, a specific period of time can be set in the collection and trigger setting window. Then the waveform data that occurred within the set period and the parameter information can be buffered in a servo amplifier, and can be read out and displayed on the GOT. By saving a normal waveform data as a history, you can compare it with the data measured in the same conditions by superimposing them; therefore it is useful for equipment maintenance.

Specification details and restrictions   * For the necessary option devices, please refer to the "Function list" (page 148).

● **Target models**   MELSERVO-J4 Series (MR-J4-□B(-RJ)), MR-J4W2-□B, MR-J4W3-□B), MELSERVO-JE Series (MR-JE-□B)
● **Supported connection types*1**   Connection via motion CPU/Simple Motion module*2*3
*1 For the details of connectable models of each connection type, please refer to the "Connectable model list" (page 152).
*2 When a programmable controller is connected to a servo amplifier through a Simple Motion module (SSCNET III/H), GOT and a motion CPU (Q Series) or GOT and CR800-Q (Q172DSRCPU) cannot be directly connected via Ethernet.
*3 When a servo amplifier is connected to the GOT through a motion CPU (Q Series), use a connection type other than the CC-Link IE Field Network connection between the CPU and the GOT. When the motion CPU and the GOT are connected by CC-Link connection (intelligent device station), set [MELSEC (compatible)] to the transmission path.

Recommended industries			Supported GOT types			Supported devices		
Automotive	SEMICON, LCD	Electronics	GT27	GT25	GT23	PLC	Servo	Inverter
F & B	Pharma	Plant	GT21	GS21	SoftGOT		Robot	CNC

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GOT Solutions - GOT Easy Drive Control (Servo) Interactive Solutions

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Support servo system maintenance

Support maintenance work

■ Machine diagnosis function

Having problems?	GOT will solve your problems!

GOT2000

Motion controller

Servo amplifier
MR-J4-□B(-RJ)

GOT displays the estimation value collected by the machine diagnosis function of the servo amplifier.

Ball screw

Servo motor

How can I predict deterioration of a machine if it has excessive load and is frequently accelerated?

Without using a personal computer, you can predict the deterioration of the machine for easy preventive maintenance.

Function features

GOT displays the machine diagnosis screen that is equivalent to the maintenance functions of MR Configurator2.
You can easily check the machine diagnosis information of servo amplifiers on the GOT without a personal computer.

Failure prediction function

When connecting to MR-J4-GF(-RJ), the servo amplifier detects and notifies deterioration of drive components.
By grasping the failure prediction information of the production line and performing maintenance at appropriate time, operation rate of the whole production line can be increased.

By switching the axis number, multiple axes can be maintained on the same screen.

Save estimation values to a file and compare the values to check the deterioration of the machine.

Machine diagnosis screen*1

GOT displays estimation values (machine friction, torque vibration, etc.) that are collected by the machine diagnosis function of the servo amplifier. When any of the estimation values exceed the threshold values that are set on the GOT, the numerical value display area turns red.
*1 Ready to use sample screens (VGA) are available.

Specification details and restrictions

● **Target models**   MELSERVO-J4 Series (MR-J4-□A(-RJ), MR-J4-□B(-RJ), MR-J4W2-□B, MR-J4W3-□B, MR-J4-□GF(-RJ)), MELSERVO-JE Series (MR-JE-□A, MR-JE-□B)
● **Supported connection types*1**   Direct connection with a servo amplifier, connection via motion controller/Simple Motion module, connection via CC-Link IE Field Network Simple Motion module/master or local station module
*1 For the details of connectable models of each connection type, please refer to the "Connectable model list" (page 152).
● **Machine diagnosis**   Friction estimation requires acceleration and deceleration of machine operation speed. When performing speed control or torque control, the speed is always kept constant so that friction estimation may not be performed. For the details, please refer to the GOT2000 Drive Control (Servo) Interactive Solutions catalog (L(NA)08335ENG).
● **How to obtain sample screens**   Sample screens are included in GT Works3. For the details, please contact your local sales office.
The sample screens are supported by the following GT Works3 versions.
MR-J4-□A(-RJ): Ver.1.126G or later, MR-J4-□B(-RJ), MR-J4W2-□B, MR-J4W3-□B: Ver.1.155M or later, MR-JE-□B: Ver.1.150G or later.

Recommended industries
| Automotive | Electronics | F & B |
| Pharma |

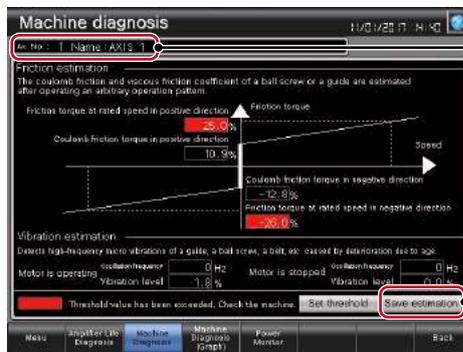### Supported GOT types
| GT27 | GT25 | GT23 |
| GT21 | GS21 | SoftGOT |

Supported devices
| PLC | Servo | Inverter |
| Robot | CNC |

Support servo system maintenance

Support
maintenance
work

■ Servo amplifier life diagnosis function

Having problems?	GOT will solve your problems!

Periodic check

Check the smoothing capacitor energization time
or the inrush relay on/off times at a glance

A problem occurred at the worksite. Can I check the situation in my office?

Without creating screens for remote monitoring, check the worksite on GT SoftGOT2000 by reading project data from GOT at the worksite.

Function features

GOT displays the amplifier life diagnosis screen that is equivalent to the maintenance functions of MR Configurator2.
You can easily check the internal data of servo amplifiers on the GOT without a personal computer.

By switching the axis number, multiple axes can be maintained on the same screen.

Amplifier life diagnosis screen*1

Check cumulative operation time, on/off counts of inrush relay on GOT. In addition, replacement timing of servo amplifier components (capacitor, relay) can be displayed on the GOT.

*1 Ready to use sample screens (VGA) are available.

Specification details and restrictions

● **Target models**   MELSERVO-J4 Series (MR-J4-□A(-RJ), MR-J4-□B(-RJ), MR-J4W2-□B, MR-J4W3-□B, MR-J4-□GF(-RJ)), MELSERVO-JE Series (MR-JE-□A, MR-JE-□B)
● **Supported connection types***1   Direct connection with a servo amplifier, connection via motion controller/Simple Motion module, connection via CC-Link IE Field Network Simple Motion module/master or local station module
*1 For the details of connectable models of each connection type, please refer to the "Connectable model list" (page 152).
● **How to obtain sample screens**   Sample screens are included in GT Works3. For the details, please contact your local sales office.
The sample screens are supported by the following GT Works3 versions.
MR-J4-□A(-RJ): Ver.1.126G or later, MR-J4-□B(-RJ), MR-J4W2-□B, MR-J4W3-□B: Ver.1.155M or later, MR-JE-□B: Ver.1.150G or later.

Recommended industries			Supported GOT types			Supported devices		
Automotive	Electronics	F & B	GT27	GT25	GT23	PLC	Servo	Inverter
Pharma			GT21	GS21	SoftGOT	Robot		CNC

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GOT Solutions - GOT Easy Drive Control (Servo) Interactive Solutions

Support startup and adjustment of servo systems

GOT Drive

Support system startup/adjustment

■ One-touch tuning function/Tuning function

Having problems?	GOT will solve your problems!

GOT2000

By switching the axis number, multiple axes can be adjusted on the same screen.

Simple Motion module

Servo amplifier MR-J4-□B(-RJ)

SSCNETⅢ/H SERVO SYSTEM CONTROLLER NETWORK

It's difficult to determine an optimum gain when setting up the device. It's bothersome to connect a personal computer every time I adjust a gain.

GOT can be used to adjust gains of servo amplifiers. Since the adjustment can be performed in parallel with other setup work, you can efficiently set up the system.

Function features

GOT displays the tuning screens that are equivalent to the adjustment functions of MR Configurator2.
You can easily adjust gain parameters of servo amplifiers on the GOT without a personal computer.

One-touch tuning screen[*1]

Just a single touch on the switch on the GOT screen. You can check tuning results such as settling time and overshoot amount.

Tuning screen[*1]

To obtain higher performance, you can perform fine tuning of gain parameters in the tuning screen.

*1 Ready to use sample screens (VGA) are available.

Specification details and restrictions

● **Target models** MELSERVO-J4 Series (MR-J4-□A(-RJ), MR-J4-□B(-RJ), MR-J4W2-□B, MR-J4W3-□B, MR-J4-□GF(-RJ)), MELSERVO-JE Series (MR-JE-□A, MR-JE-□B)
● **Supported connection types[*1]** Direct connection with a servo amplifier, connection via motion controller/Simple Motion module, connection via CC-Link IE Field Network Simple Motion module/master or local station module
*1 For the details of connectable models of each connection type, please refer to the "Connectable model list" (page 152).
● **How to obtain sample screens** Sample screens are included in GT Works3. For the details, please contact your local sales office.
The sample screens are supported by the following GT Works3 versions.
MR-J4-□A(-RJ): Ver.1.126G or later, MR-J4-□B(-RJ), MR-J4W2-□B, MR-J4W3-□B: Ver.1.155M or later, MR-JE-□B: Ver.1.150G or later.

Recommended industries	Supported GOT types	Supported devices
Automotive Electronics F & B Pharma	GT27 GT25 GT23 GT21 GS21 SoftGOT	PLC Servo Inverter Robot CNC

Graphically monitor servo systems

GOTDrive

■ System launcher (servo network) function

Having problems?	GOT will solve your problems!

System configuration diagram

Select motion CPU or Simple Motion module

Servo network configuration diagram

Select system launcher (servo network) from the function list

Output the servo system network configuration to a text/CSV file

How can I check the status of servo systems on GOT?

I want to check the servo system at the worksite quickly.

A graphical configuration diagram indicates the status of servo amplifier.

Function features

GOT generates the servo network configuration diagram for the number of used axes so that the servo system can be checked in a graphical screen. By starting the drive recorder from the servo network configuration diagram, you can quickly identify the error cause and solve the problem.

Start various functions from the system launcher (servo network diagram)

Select servo amplifier

Where the error occurred is visible and easy to check

Select a function from the context menu

System configuration display
Displays the model name and the serial number of servo amplifiers or motors.

Alarm display
Displays currently occurring errors in the servo amplifier.

Drive recorder graph waveform
Waveforms can be analyzed from the drive recorder information list screen.

Specification details and restrictions

● **Target models**   MELSERVO-J4 Series (MR-J4-□B(-RJ), MR-J4W2-□B, MR-J4W3-□B)
● **Supported connection types*¹**   Connection via motion controller/Simple Motion module
*1 For the details of connectable models of each connection type, please refer to the "Connectable model list" (page 152).
● **Extended functions that can be started from the system launcher (servo network)**   System launcher, drive recorder, servo amplifier graph

Recommended industries			Supported GOT types			Supported devices		
Automotive	SEMICON, LCD	Electronics	GT27	GT25	GT23	PLC	Servo	Inverter
F & B	Pharma	Plant	GT21	GS21	SoftGOT		Robot	CNC

Support startup, maintenance, and cost reduction

GOT Drive

Support maintenance work

■ Power monitor

Having problems?	GOT will solve your problems!

I just need to check power consumption. It's bothersome to connect a personal computer.

Calculation data

Servo amplifier MR-J4-□B(-RJ)

Servo motor

Calculate power consumption on servo amplifier

Driving power energy

Power supply

Servo motor

Regenerative energy

Display power consumption and total power consumption on HMI

To manage specific consumption and observe demand, power consumption should be checked easily.

GOT can be used to check (visualize) power consumption and total power consumption without using measuring equipment such as a power meter or a personal computer.

Specification details and restrictions

● **Target models**   MELSERVO-J4 Series (MR-J4-□A(-RJ), MR-J4-□B(-RJ), MR-J4W2-□B, MR-J4W3-□B, MR-J4-□GF(-RJ)), MELSERVO-JE Series (MR-JE-□A, MR-JE-□B)
● **Supported connection types***[1]   Direct connection with a servo amplifier, connection via motion controller/Simple Motion module, connection via CC-Link IE Field Network Simple Motion module/master or local station module
*1 For the details of connectable models of each connection type, please refer to the "Connectable model list" (page 152).
● **How to obtain sample screens**   Sample screens are included in GT Works3. For the details, please contact your local sales office.
The sample screens are supported by the following GT Works3 versions.
MR-J4-□A(-RJ): Ver.1.126G or later, MR-J4-□B(-RJ), MR-J4W2-□B, MR-J4W3-□B: Ver.1.155M or later, MR-JE-□B: Ver.1.150G or later.

Recommended industries			Supported GOT types			Supported devices		
Automotive	SEMICON, LCD	Electronics	GT27	GT25	GT23	PLC	Servo	Inverter
F & B	Pharma		GT21	GS21	SoftGOT	Robot		CNC

■ Alarm display function

Having problems?	GOT will solve your problems!

AL.10.1

What this alarm number indicates?

Alarm display

Document display   * Not supported by GT23, GT21, and GS21.

Touch here to display the detail information

Check the details of the alarm

How can I easily identify the problem cause when an alarm occurs on a servo amplifier?

Without opening a cabinet, current alarms, alarm history, and the detail information can be checked on GOT. Use the document display function* to display the servo amplifier user's manual and quickly check troubleshooting procedures on the GOT.
* Not supported by GT23, GT21, and GS21.

Specification details and restrictions

● **Target models**   MELSERVO-J4 Series (MR-J4-□A(-RJ), MR-J4-□B(-RJ), MR-J4W2-□B, MR-J4W3-□B, MR-J4-□GF(-RJ)), MELSERVO-J3 Series, MELSERVO-JE Series (MR-JE-□A, MR-JE-□B)
● **Supported connection types***[1]   Direct connection with a servo amplifier, connection via motion controller/Simple Motion module, connection via CC-Link IE Field Network Simple Motion module/master or local station module
*1 For the details of connectable models of each connection type, please refer to the "Connectable model list" (page 152).
● **How to obtain sample screens**   Sample screens are included in GT Works3. For the details, please contact your local sales office.
The sample screens are supported by the following GT Works3 versions.
MR-J4-□A(-RJ): Ver.1.126G or later, MR-J4-□B(-RJ), MR-J4W2-□B, MR-J4W3-□B: Ver.1.155M or later, MR-J3-□A: Ver.1.128J or later, MR-JE-□B: Ver.1.150G or later.

Recommended industries			Supported GOT types			Supported devices		
Automotive	SEMICON, LCD	Electronics	GT27	GT25	GT23	PLC	Servo	Inverter
F & B	Pharma		GT21	GS21	SoftGOT	Robot		CNC

Support startup and adjustment of servo systems

GOT Drive

Support system startup/ adjustment

■ Servo amplifier monitor function

Having problems?	GOT will solve your problems!

It's bothersome to design setting screen from scratch...

GOT2000

Servo amplifier MR-J4-□A(-RJ)

RS-422

Dedicated screens, sample screens are available!

How can I check the status of servo amplifier easily?

In a system which outputs pulse trains, the GOT can be connected to a servo amplifier in a serial connection to perform the following operations: set up, monitoring, alarm display, diagnosis, parameter setting, and test operations.

Function features

Various monitoring functions, changes to the parameter settings, and test operations can be performed on the servo amplifier connected to the GOT.

Dedicated screens

Without creating screens, parameters can be monitored and written from dedicated screens.

Sample screens (VGA)

Various sample screens such as monitoring, parameter settings, test operations are available and they are all customizable.

Specification details and restrictions

● **Target models** MELSERVO-J4 Series (MR-J4-□A(-RJ)), MELSERVO-J3 Series (MR-J3-□A), MELSERVO-J2-Super Series (MR-J2S-□A, MR-J2S-□CP), MELSERVO-J2M Series (MR-J2M-P8A)

* Supported functions of the servo amplifier monitor vary depending on the servo amplifier model.

● **Supported connection types** Direct connection with a servo amplifier

● **How to obtain sample screens** Sample screens are included in GT Works3. For the details, please contact your local sales office.

The sample screens are supported by the following GT Works3 versions.

MR-J4-□A(-RJ): Ver.1.126G or later, MR-J3-□A: Ver.1.128J or later.

Recommended industries	Supported GOT types	Supported devices
Automotive **Electronics** F & B	**GT27** **GT25** GT23	PLC **Servo** Inverter
Pharma	GT21 GS21 SoftGOT	Robot CNC

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GOT Solutions - GOT Easy Drive Control (Servo) Interactive Solutions

Support startup and maintenance of servo systems

GOT Drive

Support maintenance work

■ Intelligent module monitor function

Having problems?	GOT will solve your problems!

Programmable controller

Servo amplifier

Positioning module

Servo motor

Can I check the programs and the status of a positioning module at the same time?

Intelligent module monitor RD75D4 monitor screen (example)

GX Works3 ladder monitor screen (example)

Operation panel

USB connection

How can I debug positioning systems efficiently?

You can debug positioning systems efficiently by displaying the data such as the status, parameters, and the I/O information of positioning module axes on GOT while monitoring positioning sequence programs on a personal computer simultaneously.

* For the details of supported devices and connection types, please refer to the relevant product manual.

Recommended industries
Automotive SEMICON, LCD Electronics
F & B Pharma

Supported GOT types
GT27 GT25 GT23
GT21 GS21 SoftGOT

Supported devices
PLC Servo Inverter
Robot CNC

■ R motion monitor function/Q motion monitor function

Having problems?	GOT will solve your problems!

Programmable controller

Servo amplifier

Motion controller

Servo motor

R motion monitor screen   Q motion monitor screen

Can I check and change servo parameters of a motion controller easily?

In a dedicated screen on GOT, it is possible to monitor and set parameters of motion controllers that are installed on the same base unit.

* For the details of supported devices and connection types, please refer to the relevant product manual.

Recommended industries
Automotive SEMICON, LCD Electronics
F & B Pharma

Supported GOT types
GT27 GT25 GT23
GT21 GS21 SoftGOT

Supported devices
PLC Servo Inverter
Robot CNC

GOT Drive

Support debug of SFC programs

Support
maintenance
work

■ Motion SFC monitor function

Having problems?	GOT will solve your problems!

Program tabs
Touch a tab to display the program.

Step/transition
The active step is highlighted. Touch the step to display the detail program window. The SFC diagram scrolls automatically along with the progress of active steps.

Detail program window
Displays the program and the present value of the calculation control step/transition.

Cannot do anything without a PC?

How can I check motion SFC programs without a personal computer?

GOT can monitor motion SFC programs in the motion CPU (Q series) and display them in the SFC diagram format.

Function features

GOT can be used to monitor motion SFC programs and device values of a motion CPU (Q Series) which is connected to the GOT. Viewing the program batch monitor or active step list enables you to check the complete status at a glance.

Program batch monitor

Active step list

Specification details and restrictions

* For the necessary option devices, please refer to the "Function list" (page 148).

● **Target models** Motion CPU (Q Series) *1*2
*1 Use the following production number motion CPU when using the Q172CPU or Q173CPU.
• Bus connection, direct CPU connection
　Q172CPU: production number K******* or later　　Q173CPU: production number J******* or later
• Other than bus connection, direct CPU connection
　Q172CPU: production number N******* or later　　Q173CPU: production number M******* or later
*2 Operating system software packages for motion CPU (Q Series) should be SV13 or SV22.
Use a motion CPU with the following OS installed when using the Q172CPU, Q173CPU, Q172CPUN, or Q173CPUN.
• SW6RN-SV13Q□: 00H or later (00E or later for using the Q172CPU or Q173CPU with the bus connection or direct CPU connection)
• SW6RN-SV22Q□: 00H or later (00E or later for using the Q172CPU or Q173CPU in the bus connection or direct CPU connection)
* Production of Q172CPU, Q173CPU, Q172CPUN, and Q173CPUN has been discontinued.
● **Supported connection types*1** Ethernet connection*2, direct CPU connection, serial communication connection, CC-Link IE Controller Network connection, CC-Link connection, bus connection, MELSECNET connection
*1 For the details of connectable models of each connection type, please refer to the "Connectable model list" (page 152).
*2 When the CC-Link IE Field Network Ethernet adapter module is used, the motion SFC monitor function cannot be used.

Recommended industries
Automotive　Plant

Supported GOT types
GT27　GT25　GT23　GT21　GS21　SoftGOT

Supported devices
PLC　Servo　Inverter　Robot　CNC

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GOT Solutions - GOT Easy Drive Control (Servo) Interactive Solutions

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Support startup and maintenance of servo systems

GOT *Drive*

Support maintenance work

NEW

■ Motion program editor function

Having problems?	GOT will solve your problems!

Select a motion CPU and touch Program List

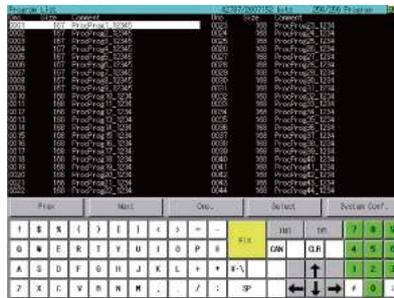Select a program to edit and touch Select

An error occurred during production. Can I edit the motion programs (G-code programs) at the worksite?

GOT can be used to edit motion programs (G-code programs). You can edit the necessary motion program by selecting it from the program list.

Function features

Motion programs (G-code programs) can be edited in the dedicated screen of the motion program editor function of the GOT.

* Supported by GOTs with a resolution of SVGA or higher.
* To use G-code control, the G-code add-on library (paid) must be installed.

Program List screen

GOT lists the G-code programs stored in the connected motion CPU (MELSEC iQ-R Series).

Program Editor screen

G-code programs listed on the GOT can be edited in the line editor format.

Specification details and restrictions

● **Target models*1** R64MTCPU/R32MTCPU/R16MTCPU (valid when the G-code add-on library is used)

*1 When all the following conditions are satisfied, the motion program editor is available.
• The operating system software is SW10DNC-RMTFW Ver.14 or later.
• The add-on library is Gcode_Ctrl.adm Ver.0102 or later.
• Any item other than [Not Used] is set in the G-code control setting in the basic setting.

● **Supported connection types** Ethernet connection

Recommended industries

Automotive	SEMICON, LCD	Electronics
F & B	Pharma	

Supported GOT types

GT27*	GT25*	GT23
GT21	GS21	SoftGOT

* Excluding some models. For the details, refer to the function descriptions above.

Supported devices

PLC	Servo	Inverter
	Robot	CNC

Compilation of interactive functions with servos

GOT **Drive** **plus**

Support maintenance work

Support system startup/adjustment

Support system operation

NEW

■ GOT Drive Plus (paid template screens)

Having problems?

In free-version sample screens, only one axis can be checked on a single screen...

The resolution must be changed to fit the GOT.

Is there an easier way to visualize multi-axes servo systems?

GOT will solve your problems!

Machine diagnosis

Information of multiple axes

The detailed graph can be displayed from the list screen

With GOT Drive Plus, data of 16 axes can be displayed on one screen without changing the resolution setting of the GOT project data. By monitoring multiple servo amplifiers in the equipment on one screen, you can comprehensively check the servo system.

Function features

GOT Drive Plus is the paid GOT project data that can visualize servo systems. The data is available for all resolutions of GT27 and GT25 models. Since the template screens for the GOT Mobile function are provided, you can promptly start the remote monitoring of servo systems. The template project can be used as is depending on the system configuration, thus reducing time for screen creation.

For the details, please refer to the GOT2000 Drive Control (Servo) Interactive Solutions GOT Drive Plus catalog (L(NA)08594ENG).

Quick remote monitoring with the GOT Mobile function template screens

Features comparison

○: Reduced screen design/working man-hours   ×: Increased screen design/working man-hours

Item	GOT Drive Plus **NEW**		GOT Drive	
	GT Works3 Add-on License for GOT2000 Enhanced Drive Control (Servo) Project Data (SW1DND-GTSV-MZ)		Sample screens included in GT Works3	
Screen design man-hours	○	Screens are designed for every resolution of GT27 and GT25 and can be used to connect to Motion controllers and Simple Motion modules. The screens can be used as it is.	×	Sample screens are available only for VGA to connect to Simple Motion modules. The layout must be adjusted according to the resolution of GOT to be used as well as the system configuration.
Multi-axis monitor	○	Up to 16 axes can be monitored at the same time on one screen. [Applicable screens] • Machine diagnosis • Effective load factor • Alarm history * On the screens other than the above, only one axis can be monitored on one screen.	×	Only one axis can be monitored on one screen.
Remote monitoring	○	Screens for the GOT Mobile function are provided as standard for remote monitoring on tablets and smartphones.	×	Screens for the GOT Mobile function are not available. The users must create the mobile screens.

Specification details and restrictions

● **Target models**   MELSERVO-J4 Series (MR-J4-□B(-RJ), MR-J4-W2-□B, MR-J4W3-□B)

● **Supported connection types**[1]   Connection via motion controller/Simple Motion module

[1] For the details of connectable models of each connection type, please refer to the "Connectable model list" (page 152).

● **Lineup of project data** • WXGA (1280 × 800) • WVGA (800 × 480) • XGA (1024 × 768) • VGA (640 × 480) • SVGA (800 × 600) • 5.7" VGA (640 × 480)

Recommended industries

Automotive	SEMICON, LCD	Electronics
F & B	Pharma	Plant

Supported GOT types

GT27	GT25	GT23
GT21	GS21	SoftGOT

Supported devices

PLC	Servo	Inverter
Robot		CNC

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GOT Solutions - GOT Easy Drive Control (Servo) Interactive Solutions

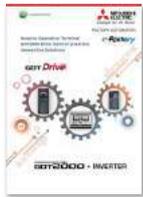# GOT Easy Drive Control (Inverter) Interactive Solutions NEW

MITSUBISHI GRAPHIC OPERATION TERMINAL **GOT Drive**

GOT2000 + INVERTER

Challenges that cannot be resolved just with the inverter can now be resolved with GOT2000 and inverter interactive functions.

For the details, please refer to the GOT2000 Series Drive Control (Inverter) Interactive Solutions catalog (L(NA)08572ENG).

The GOT2000 provides advanced functionality and improves connectivity with Mitsubishi Electric inverter systems. It provides some functions of FR Configurator2. The GOT Drive enhanced functionality is designed to realize central monitoring, speed up system startup, improve predictive maintenance and troubleshooting.

■ **Drive control interactive functions and supported inverter models**

○: Supported   ×: Not supported   △: Only monitorable parameters are supported   —: Not applicable   ●: Sample screens available

Function	CASE 1						CASE 2	
	FR-A800-E/FR-F800-E		FR-A800-E-CRN/FR-A800-E-R2R		FR-E700-NE		FR-A800-GF/FR-A800 + FR-A8NCE/FR-F800 + FR-A8NCE	
	Function available	Sample screen*1*3	Function available	Sample screen*1*3	Function available	Sample screen*1*3	Function available	Sample screen*1*3
Parameter setting (simple mode)	○	●	○	×	○	×	○	●*2
Parameter recipe (simple backup/restoration)	○	●	○	×	○	×	○	●*2
Batch monitor	○	●	○	×	○	×	○	●*2
Operation command	○	●	○	×	○	×	○	●*2*5
Machine diagnosis (load characteristics measurement)	○	●	○	×	×	×	○	●*2*5
Inverter life diagnosis	○	●	○	×	○	×	○	●*2
FA transparent	○	—	○	—	○	—	○	—

Function	CASE 3						CASE 4					
	FR-A800-E/FR-F800-E		FR-A800-E-CRN/FR-A800-E-R2R		FR-E700-NE		FR-A800/FR-F800		FR-A800-CRN/FR-A800-R2R		FR-E700/FR-D700	
	Function available	Sample screen*1*3	Function available	Sample screen*1*3	Function available	Sample screen*1*3	Function available	Sample screen*1*3	Function available	Sample screen*1*3	Function available	Sample screen*1*3
Parameter setting (simple mode)	○	●*2	○	×	○	×	○	●	○	×	○	●
Parameter recipe (simple backup/restoration)	○	●*2	○	×	○	×	○	×	○	×	○	×
Batch monitor	○	●*2	○	×	○	×	○	●	○	×	△	●
Operation command	○	●*2	○	×	○	×	○	●	○	×	○	●
Machine diagnosis (load characteristics measurement)	○	●*2	○	×	×	×	○	×	○	×	×	×
Inverter life diagnosis	○	●*2	○	×	○	×	○	●	○	×	△	●
FA transparent	○	—	○	—	○	—	○*4	—	○*4	—	○*4	—

*1 The sample screen is the project data that is included in GT Works3 (Ver.1.225K). Sample screens are not supported by GT23, GT21, and GS21.
*2 The sample screen for CASE 1 can be used by changing the controller setting into the one for the system configuration to be used.
*3 If the sample screen of the required inverter is not available, monitoring is possible by creating a project and setting the inverter parameters and devices in the numerical displays and lamps on the user's screen.
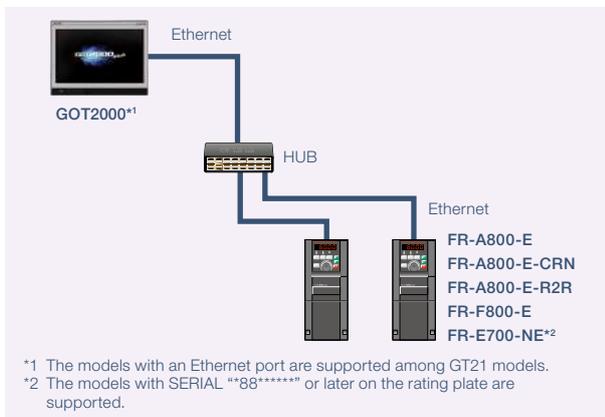*4 The function can be used when GOT and personal computer are connected with USB.
*5 Settings need to be changed so that the CPU devices assigned to RY link devices can be controlled directly from GOT.
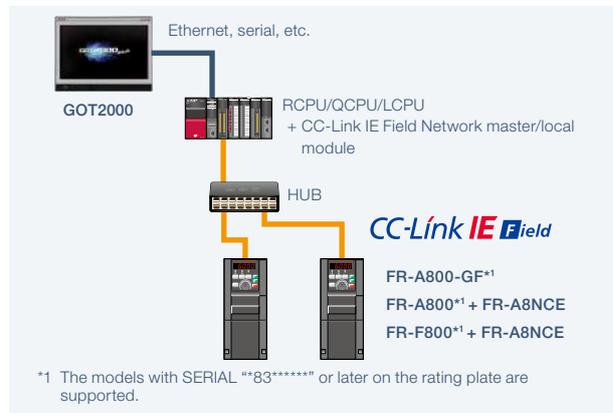
GOT *Drive*

GOT and inverter system configurations

Select the required connection type to match your system configuration. Multiple inverters can be monitored with one GOT by switching the target station number.
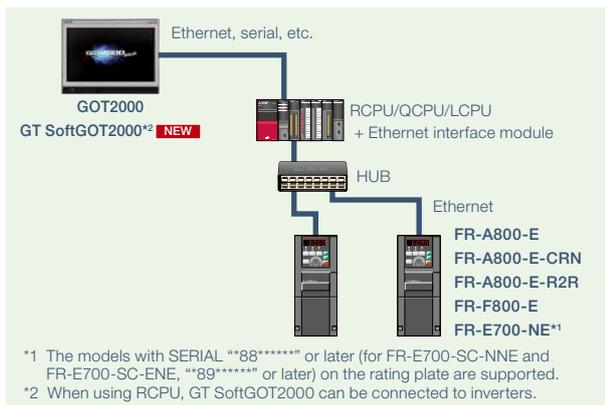
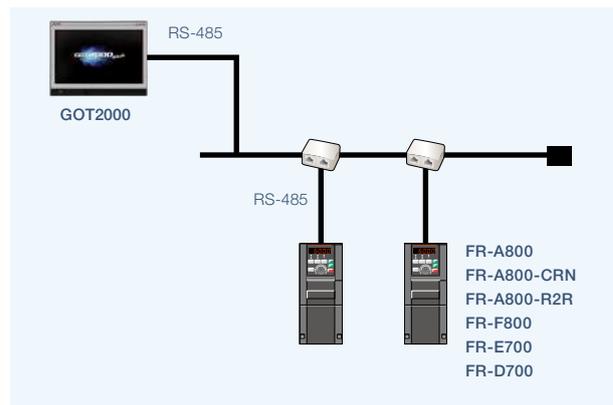**CASE 1** Direct connection with Ethernet

GOT2000*1

Ethernet

HUB

Ethernet

FR-A800-E
FR-A800-E-CRN
FR-A800-E-R2R
FR-F800-E
FR-E700-NE*2

*1 The models with an Ethernet port are supported among GT21 models.
*2 The models with SERIAL "*88******" or later on the rating plate are supported.

CASE 2 CC-Link IE Field Network connection via programmable controller

GOT2000

Ethernet, serial, etc.

RCPU/QCPU/LCPU
+ CC-Link IE Field Network master/local module

HUB

CC-Link IE Field

FR-A800-GF*1
FR-A800*1 + FR-A8NCE
FR-F800*1 + FR-A8NCE

*1 The models with SERIAL "*83******" or later on the rating plate are supported.

CASE 3 Ethernet connection via programmable controller

**GOT2000
GT SoftGOT2000*2** NEW

Ethernet, serial, etc.

RCPU/QCPU/LCPU
+ Ethernet interface module

HUB

Ethernet

FR-A800-E
FR-A800-E-CRN
FR-A800-E-R2R
FR-F800-E
FR-E700-NE*1

*1 The models with SERIAL "*88******" or later (for FR-E700-SC-NNE and FR-E700-SC-ENE, "*89******" or later) on the rating plate are supported.
*2 When using RCPU, GT SoftGOT2000 can be connected to inverters.

CASE 4 Direct connection with RS-485

GOT2000

RS-485

RS-485

FR-A800
FR-A800-CRN
FR-A800-R2R
FR-F800
FR-E700
FR-D700

Three-step simple startup

There are various sample screens that can be used with the GOT2000 for inverter parameter setting, batch monitoring, and machine diagnosis (load characteristics measurement), etc. Use the sample screens for easy system startup.

STEP 1 ⟫

Select and connect the GOT and inverter.

Connect with your preferred connection type

GOT2000   Inverter

STEP 2 ⟫

Sample screens*1*2 matching the connection type can be used for the user's project data.

Sample screen

STEP 3 ⟫

Transfer the project data to the GOT.

Transfer   Startup completed

GOT2000   Inverter

*1 Sample screens are included in GT Works3 (Ver.1.205P or later). For the details, please contact your local sales office.
*2 Sample screens are available for the GOT type GT27**-V (640 × 480) only. The GOT type can be changed, and used for a GOT with different resolution. Sample screens are not supported by GT23, GT21, and GS21.

Support startup and adjustment of inverters

GOT Drive

Support system startup/adjustment

■ Parameter settings (simple mode)/Parameter recipe (simple backup/restoration)

Having problems?

Opening and closing the control panel is a hassle…

We want to set the parameters without opening the control panel!

GOT will solve your problems!

Parameter Setting screen

Back up (save) or restore (write) parameters as a recipe file when necessary.
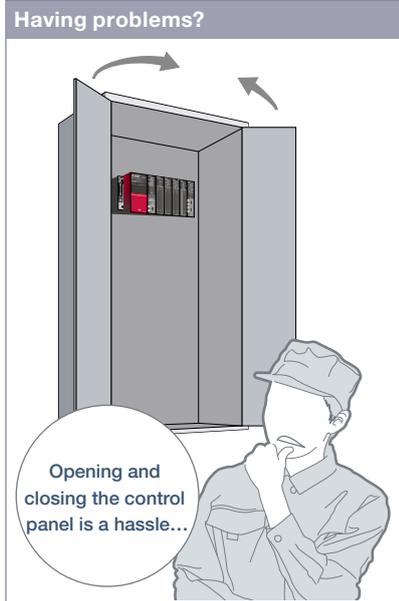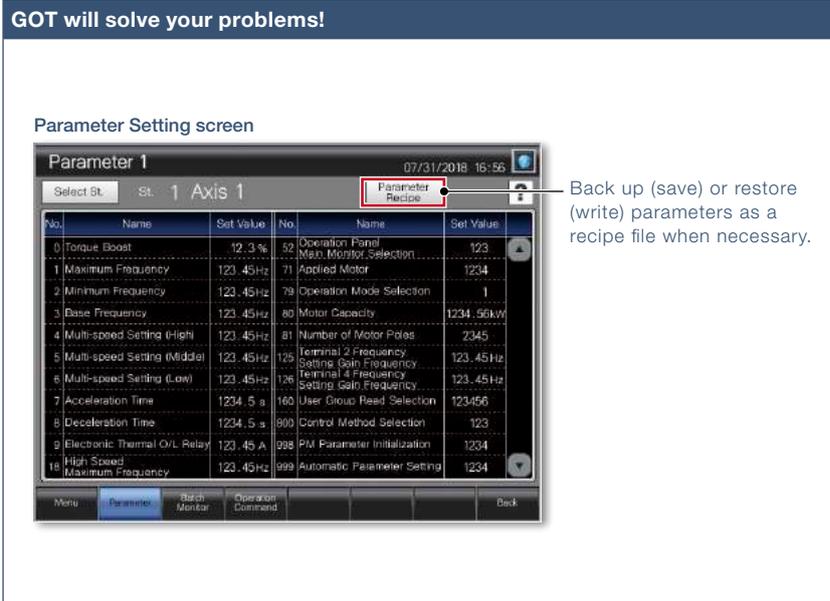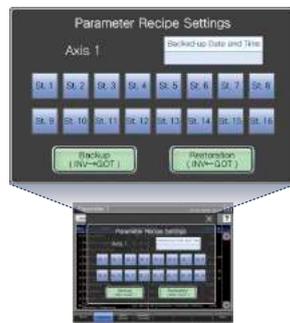
Use GOT to adjust the inverter's simple mode parameters. Since there is no need to open the control panel, the adjustment work efficiency can be increased.

Function features

GOT can be used to adjust parameters of inverters easily. Since the pre-adjustment parameters can be backed up or restored with the GOT, systems can be started up efficiently.

Parameter settings (simple mode)

Use GOT to adjust the inverter's simple mode parameters. The parameter names can be confirmed on a list, so the required parameters can be easily found and adjusted.

Parameter Setting screen

▶ How to return parameters to pre-adjustment values

❶ Back up the current parameters as a recipe file before adjustment

Recipe file

❷ Restore parameters that were previously backed up

OK

Parameter recipe (simple backup/restoration)

The current inverter parameters can be backed up (saved) as a recipe file using the GOT. To return the parameters to the pre-adjustment state while starting up and adjusting the inverter, just restore (write) the parameters that were previously backed up (saved).

* Ready to use sample screens (VGA) are available.

Specification details and restrictions

● **Target models**   FR-A800(-E), FR-A800(-E)-CRN, FR-A800(-E)-R2R, FR-F800(-E), FR-A800-GF, FR-E700(-NE), FR-D700
● **Supported connection types**[*1]   Direct connection with an inverter, connection via a programmable controller, connection via CC-Link IE Field Network master or local station module
*1 For the details of connectable models of each connection type, please refer to the "Connectable model list" (page 152).
● **How to obtain sample screens**   Sample screens are included in GT Works3. For the details, please contact your local sales office. The sample screens are supported by the following GT Works3 versions. FR-F800(-E): Ver.1.205P or later, FR-A800(-E), FR-A800-GF, FR-E700(-NE), FR-D700: Ver.1.200J or later.

Recommended industries

Automotive	SEMICON, LCD	Electronics
F & B	Pharma	Plant

Supported GOT types

GT27	GT25	GT23
GT21	GS21	SoftGOT

Supported devices

PLC	Servo	Inverter
	Robot	CNC

Support startup and adjustment of inverters

GOT Drive

Support system startup/adjustment

■ Batch monitor

Having problems?	GOT will solve your problems!
Opening and closing the control panel is a hassle…	Batch Monitor screen CC-Link IE Field

We want to monitor the inverter status without opening the control panel!

The inverter's current values such as the output frequency, output current, and output voltage can be monitored with the GOT without preparing the personal computer or directly confirming the inverter.

Specification details and restrictions

● **Target models**   FR-A800(-E), FR-A800(-E)-CRN, FR-A800(-E)-R2R, FR-F800(-E), FR-A800-GF, FR-E700(-NE), FR-D700
● **Supported connection types**[1]   Direct connection with an inverter, connection via a programmable controller, connection via CC-Link IE Field Network master or local station module
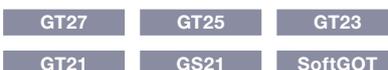[1] For the details of connectable models of each connection type, please refer to the "Connectable model list" (page 152).
● **How to obtain sample screens**   Sample screens are included in GT Works3. For the details, please contact your local sales office. The sample screens are supported by the following GT Works3 versions. FR-F800(-E): Ver.1.205P or later, FR-A800(-E), FR-A800-GF, FR-E700(-NE), FR-D700: Ver.1.200J or later.

Recommended industries

| Automotive | SEMICON, LCD | Electronics |
| F & B | Pharma | Plant |

Supported GOT types

| GT27 | GT25 | GT23 |
| GT21 | GS21 | SoftGOT |

Supported devices

| PLC | Servo | Inverter |
| | Robot | CNC |

■ Operation command

Having problems?	GOT will solve your problems!
If only there was a way to easily test the inverter operation…	Operation Command screen CC-Link IE Field

We want to start up the system while confirming the inverter's operation!

The inverter operation commands can be issued from the GOT. Since the system operation can be confirmed while monitoring the inverter's output frequency and output current values, the startup work efficiency can be increased.

Specification details and restrictions

● **Target models**   FR-A800(-E), FR-A800(-E)-CRN, FR-A800(-E)-R2R, FR-F800(-E), FR-A800-GF, FR-E700(-NE), FR-D700
● **Supported connection types**[1]   Direct connection with an inverter, connection via a programmable controller, connection via CC-Link IE Field Network master or local station module
[1] For the details of connectable models of each connection type, please refer to the "Connectable model list" (page 152).
● **How to obtain sample screens**   Sample screens are included in GT Works3. For the details, please contact your local sales office. The sample screens are supported by the following GT Works3 versions. FR-F800(-E): Ver.1.205P or later, FR-A800(-E), FR-A800-GF, FR-E700(-NE), FR-D700: Ver.1.200J or later.

Recommended industries

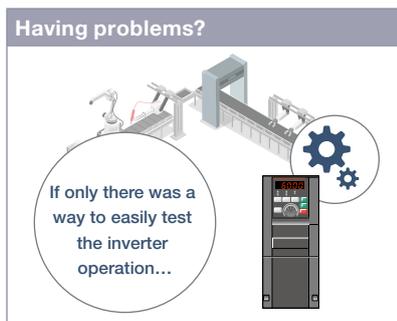| Automotive | SEMICON, LCD | Electronics |
| F & B | Pharma | Plant |

Supported GOT types

| GT27 | GT25 | GT23 |
| GT21 | GS21 | SoftGOT |

Supported devices

| PLC | Servo | Inverter |
| | Robot | CNC |

4

GOT Solutions - GOT Easy Drive Control (Inverter) Interactive Solutions

Support maintenance of inverters

GOT Drive

■ Machine diagnosis (load characteristics measurement)

Having problems?	GOT will solve your problems!

What is the cause of the system error…

GOT2000

Detect system errors with the inverter, and display them on the GOT

Ethernet

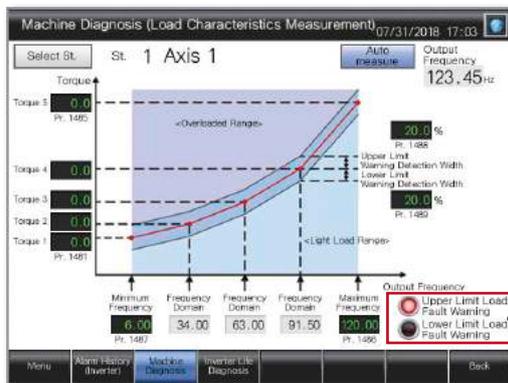We want to detect clogged filters and clogged pipes!

The relation of output frequency and torque in the normal state can be saved in the inverter, and used to check whether the operation is taking place with a normal load. If the result is out of the normal range, an error or warning is output so that it is useful to detect system errors and perform maintenance work.

Function features

Detect system errors with the inverter, and display them on the GOT. If the load is out of the normal range, an error indicator lamp lights up so that it is useful to perform quick troubleshooting.

<Possible error causes>
- ■ In overload range: clogged filter, clogged pipe, etc.
- ■ In light load range: broken belt, broken blade, idle run, etc.

The lamp lights up while the load characteristics value is out of the range between the set upper and lower limit alarm detection width values.

Machine Diagnosis (Load Characteristics Measurement) screen

Set the range of frequency to detect load characteristics error and calculate the load characteristics reference value. Set the upper and lower limit warning detection width (threshold value) against the calculated reference value.

Specification details and restrictions

● **Target models**   FR-A800(-E), FR-A800(-E)-CRN, FR-A800(-E)-R2R, FR-F800(-E), FR-A800-GF
● **Supported connection types*[1]**   Direct connection with an inverter, connection via a programmable controller, connection via CC-Link IE Field Network master or local station module
*1 For the details of connectable models of each connection type, please refer to the "Connectable model list" (page 152).
● **How to obtain sample screens**   Sample screens are included in GT Works3. For the details, please contact your local sales office. The sample screens are supported by the following GT Works3 versions. FR-F800(-E): Ver.1.205P or later, FR-A800(-E), FR-A800-GF: Ver.1.200J or later.

Recommended industries			Supported GOT types			Supported devices		
Automotive	SEMICON, LCD	Electronics	GT27	GT25	GT23	PLC	Servo	Inverter
F & B	Pharma	Plant	GT21	GS21	SoftGOT		Robot	CNC

Support maintenance of inverters

Support
maintenance
work

■ Inverter life diagnosis

Having problems?	GOT will solve your problems!
The inverter has failed…	Inverter Life Diagnosis screen Replacement timing of inverter components can be displayed on the GOT RS-485

We want to know the inverter replacement timing!

GOT can be used to monitor the operation status of the inverter's components (main circuit capacitor, control circuit capacitor, cooling fan, etc.) and confirm the replacement timing. Perform predictive maintenance by replacing parts before the inverter fails.

Specification details and restrictions

● **Target models** FR-A800(-E), FR-A800(-E)-CRN, FR-A800(-E)-R2R, FR-F800(-E), FR-A800-GF, FR-E700(-NE), FR-D700
● **Supported connection types**[1] Direct connection with an inverter, connection via a programmable controller, connection via CC-Link IE Field Network master or local station module
[1] For the details of connectable models of each connection type, please refer to the "Connectable model list" (page 152).
● **How to obtain sample screens** Sample screens are included in GT Works3. For the details, please contact your local sales office. The sample screens are supported by the following GT Works3 versions. FR-F800(-E): Ver.1.205P or later, FR-A800(-E), FR-A800-GF, FR-E700(-NE), FR-D700: Ver.1.200J or later.

Recommended industries			Supported GOT types			Supported devices		
Automotive	SEMICON, LCD	Electronics	GT27	GT25	GT23	PLC	Servo	Inverter
F & B	Pharma	Plant	GT21	GS21	SoftGOT		Robot	CNC

■ FA transparent

Having problems?	GOT will solve your problems!
There are so many control panels, opening, closing or adjusting them is a hassle…	USB Ethernet[1] Wireless LAN[1][2] FR Configurator2

We want to perform debugging smoothly!

By connecting a personal computer with the GOT's USB interface, the inverter can be programmed, started up, and adjusted via GOT. There is no need to open the control panel and change the cable.

[1] Some system configurations are not supported. For the details, please refer to the connection manual.
[2] Installation of the wireless LAN communication unit (GT25-WLAN) is required on the GOT. The unit cannot be used with GT2505, GT25 handy, GT23, GT21, and GS21 models. For the countries where the wireless LAN communication unit can be used and other details, please refer to the "Product list" (page 172).

Specification details and restrictions

● **Target models** FR-A800(-E), FR-A800(-E)-CRN, FR-A800(-E)-R2R, FR-F800(-E), FR-A800-GF, FR-E700(-NE), FR-D700
● **Supported connection types**[1] Connection via a programmable controller, connection via CC-Link IE Field Network master or local station module
[1] For the details of connectable models of each connection type, please refer to the "Connectable model list" (page 152).

Recommended industries			Supported GOT types			Supported devices		
Automotive	SEMICON, LCD	Electronics	GT27	GT25*	GT23*	PLC	Servo	Inverter
F & B	Pharma	Plant	GT21*	GS21*	SoftGOT		Robot	CNC

* Restrictions apply to some functions. For the details, refer to the function descriptions above.

4

GOT Solutions - GOT Easy Drive Control (Inverter) Interactive Solutions

GOT Easy Drive Control (Robot) Interactive Solutions

GOT Drive

Support system startup/ adjustment

■ Interactive functions to support startup and maintenance of robots

Having problems?

GOT will solve your problems!

Various screens are available such as the robot status monitor, data setting, and the predictive maintenance menu.

How can I startup and adjust robots easily?

Use GOT to operate or monitor the status of a robot. The robot can be started and stopped, and the error information can be monitored easily from the GOT.

* For the details of connectable models, please refer to the "Connectable model list" (page 152).

Function features

GOT can be used for simple adjustment of robots. The robot error information can also be checked; therefore, it is useful for troubleshooting.

Position edit screen*1

Position variables of robots can be edited.

Robot error screen*1

The details of errors on robots can be checked.

*1 Ready to use sample screens (VGA) are available. Sample screens are not supported by GT23, GT21, and GS21.

Specification details and restrictions

● **Target models**   FR Series (CR800-R (R16RTCPU), CR800-Q (Q172DSRCPU), CR800-D)*1, F Series (CR750-Q (Q172DRCPU), CR751-Q (Q172DRCPU), CR750-D*1, CR751-D*1), SQ Series CRnQ-700 (Q172DRCPU), SD Series CRnD-700

*1 Sample screens are available. Sample screens are not supported by GT23, GT21, and GS21.

● **Supported connection types*1**   Ethernet connection, direct CPU connection, serial communication connection, CC-Link IE Controller Network connection, CC-Link IE Field Network connection, CC-Link connection, bus connection, MELSECNET connection

*1 For the details of connectable models of each connection type, please refer to the "Connectable model list" (page 152).

● **How to obtain sample screens**   For the details, please contact your local sales office. The sample screens are supported by the following GT Works3 versions. FR Series (CR800-R (R16RTCPU), CR800-Q (Q172DSRCPU), CR800-D): Ver.1.205P or later, F Series (CR750-D, CR751-D): Ver.1.153K or later.

Recommended industries		Supported GOT types			Supported devices		
Electronics	F & B	GT27	GT25	GT23	PLC	Servo	Inverter
		GT21	GS21	SoftGOT		Robot	CNC

Support debug of SFC programs

Support maintenance work

■ Sequence program monitor (SFC) function

Having problems?	GOT will solve your problems!

Block tabs
Touch a tab to display the block.

Displayed by steps
The active step is highlighted.
Touch the step to display the zoom window or SFC diagram of the relevant block. The SFC diagram scrolls automatically along with the progress of active steps.

Transition condition
Touching a transition condition displays a window for turning on or off a bit device.

How can I debug SFC programs without a personal computer?

GOT can monitor SFC programs of the PLC CPU and display the programs in the SFC diagram format (MELSAP3 or MELSAP-L format).

Function features

With the sequence program monitor (SFC), the GOT can monitor SFC programs of controllers, and changing device values of the programs is available. The function can be used to solve problems and maintain programmable controller systems that use SFC programs.

Step list
GOT displays steps in the displayed block.

Active step list
GOT displays active steps in the displayed block.

Specification details and restrictions

* For the necessary option devices, please refer to the "Function list" (page 148).

● **Target models** QCPU (Q mode), LCPU
● **Supported connection types**[1] Ethernet connection[2], direct CPU connection[3], serial communication connection, CC-Link IE Controller Network connection, CC-Link IE Field Network connection, CC-Link connection, bus connection, MELSECNET connection
[1] For the details of connectable models of each connection type, please refer to the "Connectable model list" (page 152).
[2] When the CC-Link IE Field Network Ethernet adapter module is used, the sequence program monitor (SFC) function cannot be used.
[3] When the Q12PRHCPU or Q25PRHCPU is used, the sequence program monitor (SFC) function cannot be used.

Recommended industries		Supported GOT types			Supported devices		
Automotive	Plant	GT27	GT25	GT23	PLC	Servo	Inverter
		GT21	GS21	SoftGOT		Robot	CNC

Support RCPU, QCPU, and LCPU maintenance

Support maintenance work

■ Sequence program monitor (Ladder)/Sequence program monitor (iQ-R ladder) function

Having problems?

If only I could add a contact and a coil to debug the program...

GOT will solve your problems!

Ladder monitor screen | Worksite

Factor search screen | Ladder editor screen

How can I debug and edit ladder programs without a personal computer?

When an error occurs, monitor the ladder program and identify the cause of error. There is no need for a personal computer on the production floor. Just touch the GOT screen and easily edit the ladder program to make simple changes.

Function features

GOT can monitor and edit a sequence program in a controller in the ladder format, and also can change current values of devices.

Sequence program monitor (Ladder monitor)

Sequence programs of RCPU, QCPU, and LCPU can be monitored in the ladder format.

Image of ladder editor

Display device comments
The data stored in RCPU, QCPU, and LCPU, or the data in an SD memory card of GOT can be displayed.

Sensor X10 | M20 | Edit | Sensor X20 | M20

Enter ladder program
X20
Insert row | Delete row | Insert column | Delete column

Change the device number from X10 to X20.

Ladder editor

Sequence programs of RCPU, QCPU, and LCPU can be edited in the ladder format. Just touch the position where you want to edit (contact, vertical line, etc.) and enter, change, or delete the ladder symbol or device. Vertical lines, horizontal lines, columns, and rows can be inserted or deleted.

Specification details and restrictions
* For the necessary option devices, please refer to the "Function list" (page 148).

● **Target models**   RCPU*1, QCPU (Q mode)*2, LCPU, motion CPU (Q Series)*3, CNC (C80, C70)

*1 R08PCPU, R16PCPU, R32PCPU, and R120PCPU can be monitored only when the operation mode is the process mode. R08SFCPU, R16SFCPU, R32SFCPU, and R120SFCPU are not supported by the safety program edit and the device test of programmable controller CPUs.

*2 Excluding the Q02PHCPU, Q06PHCPU, Q12PHCPU, Q25PHCPU, Q12PRHCPU, Q25PRHCPU.

*3 Only the PLC CPU area (CPU No.1) in the Q170MCPU(-S1), Q170MSCPU(-S1) can be monitored.

● **Supported connection types*1**   Ethernet connection*2, direct CPU connection, serial communication connection, CC-Link IE Controller Network connection, CC-Link IE Field Network connection, CC-Link connection, bus connection, MELSECNET connection

*1 For the details of connectable models of each connection type, please refer to the "Connectable model list" (page 152).

*2 When the CC-Link IE Field Network Ethernet adapter module is used, the ladder editor cannot be used.

Recommended industries

| Automotive | Electronics | Plant |

Supported GOT types

| GT27 | GT25 | GT23 |
| GT21 | GS21 | SoftGOT |

Supported devices

| PLC | Servo | Inverter |
| Robot | CNC |

Support FXCPU maintenance

■ FX list editor function & FX ladder monitor function

Having problems?	GOT will solve your problems!

FX ladder monitor screen

Worksite

Programs can be changed at the worksite!

FX list editor screen

Worksite

The system has been changed at the worksite. I need to change sequence programs of the MELSEC-F Series programmable controller.

Sequence programs of the MELSEC-F Series programmable controllers can be edited in the list (command) format. Minor program changes can be applied even without a personal computer or a peripheral device.

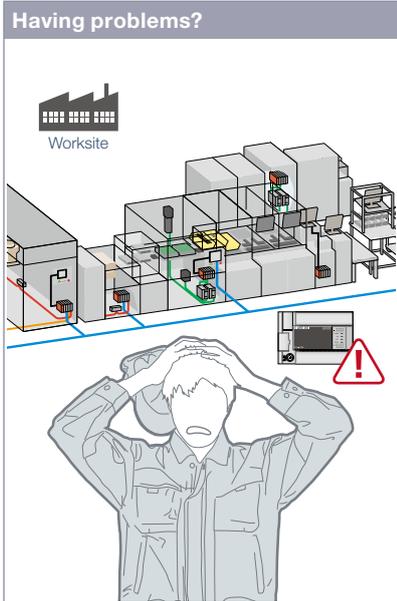### Function features

You can easily edit and monitor sequence programs without preparing any peripheral devices other than the GOT.

FX list editor

Just by simple key operations you can check, partially correct, change, or add parameters or sequence programs of an FXCPU.

* Supported by GT2107-W and GT2104-R among GT21.
* Not supported by GT25 wide models.

Example of changing sequence program commands
LD   X000   Change   LD   X000
OUT   Y020   →   OUT   Y030
LD   X001   LD   X001

FX ladder monitor

The MELSEC-FX list editor can be opened from the FX ladder monitor screen with a single touch operation. You can edit sequence programs while checking the ladder diagram. You can also display the list screen from the step line displayed in the ladder monitor.

* Not supported by GT23, GT21, and GS21.

Specification details and restrictions

<FX list editor>

● **Target models** FXCPU (excluding FX5CPU)
● **Supported connection types*1** Ethernet connection*2, direct CPU connection
*1 For the details of connectable models of each connection type, please refer to the "Connectable model list" (page 152).
*2 When the CC-Link IE Field Network Ethernet adapter module is used, the FX list editor cannot be used.
● **Functions** Writing sequence programs, setting parameters, PLC diagnostics, registering keywords, etc.

<FX ladder monitor>

● **Target models** FXCPU (excluding FX5CPU)
● **Supported connection types*1** Ethernet connection, direct CPU connection
*1 For the details of connectable models of each connection type, please refer to the "Connectable model list" (page 152).
● **Functions** Search operation, display switching, test operation*2*3, hard copy
*2 Present values of V and Z cannot be changed.
*3 Set values of T and C cannot be changed.

Recommended industries

Electronics	F & B

Supported GOT types

GT27	GT25*	GT23*
GT21*	GS21*	SoftGOT

* Excluding some models or restrictions apply to some functions. For the details, refer to the function descriptions above.

Supported devices

PLC	Servo	Inverter
	Robot	CNC

4

GOT Solutions - Sophisticated Programmable Controller Interactive Features

65

Visually check logging data

Support system operation

■ Log viewer function

Having problems?	GOT will solve your problems!

Red cursor

Blue cursor

How can I check the logging data collected by programmable controllers without opening a cabinet?

GOT displays the logging data, which achieves quick troubleshooting without using a personal computer at the worksite.

Function features

GOT displays the logging data collected by the data logging function of programmable controller CPUs or other modules.

Quick check of data by multiple cursors

Multiple cursors make it easier to visually check how the data has changed. You can search for the data by specifying the time and index No.

Logging data can be easily changed

FA transparent function (page 70) enables you to view the logging data with GX LogViewer on a personal computer and to change logging settings with CPU Module Logging Configuration Tool.

View and analyze logging data

Save logging data

Display logging data on GOT

Ethernet

Logging data

Logging data

Logging data

RCPU

LCPU

High speed data logger module

Logging data can be obtained without opening a cabinet

The logging data can be copied to a USB memory device attached to a USB interface on the front (or the backside) of the GOT. It reduces the need to remove a memory card from a CPU or high speed data logger module to retrieve the logging data.

Specification details and restrictions   * For the necessary option devices, please refer to the "Function list" (page 148).

● **Target models**   RCPU*1, QCPU*2, LCPU*3, FX5CPU*4, high speed data logger module (MELSEC iQ-R Series/Q Series), BOX data logger, CNC (C80, C70)
*1 Supported by R01CPU, R02CPU, R04CPU, R08CPU, R16CPU, R32CPU, R120CPU, R04ENCPU, R08ENCPU, R16ENCPU, R32ENCPU, R120ENCPU only.
*2 Supported by Q03UDVCPU, Q04UDVCPU, Q06UDVCPU, Q13UDVCPU, Q26UDVCPU only.
*3 Excluding L02SCPU, L02SCPU-P.   *4 Restrictions apply to the CPUs. For the details, please refer to the relevant product manual.
● **Supported connection types*1**   Ethernet connection*2
*1 For the details of connectable models of each connection type, please refer to the "Connectable model list" (page 152).
*2 R01CPU, R02CPU, R04CPU, R08CPU, R16CPU, R32CPU, R120CPU, QCPU, and LCPU are supported via the built-in Ethernet port; R04ENCPU, R08ENCPU, R16ENCPU, R32ENCPU, and R120ENCPU are supported via the port CPU P1.

Recommended industries			Supported GOT types			Supported devices		
Automotive	SEMICON, LCD	Electronics	GT27	GT25	GT23	PLC	Servo	Inverter
F & B	Pharma	Plant	GT21	GS21	SoftGOT		Robot	CNC

In case of PLC error

Support maintenance work

■ Backup/Restoration function

Having problems?	GOT will solve your problems!

Worksite

Warehouse

Office

Replace CPU

Worksite

Restore

Programmable controller error! The battery is dead! I need to go to the warehouse to get another device and a personal computer to write programs.

There is no need for a personal computer on the production floor. Simply use the GOT to write sequence programs to the controller and you can quickly recover the problem.

Function features

Backup or restore the programs and parameters of programmable controller CPUs or other devices to or from the GOT's SD memory card or USB memory. With a backup of data in the GOT, there's no need to use a personal computer when replacing the industrial devices such as the programmable controller CPU. All replacement and restoration can be completed with just the GOT.

* Excluding GT2103-PMBLS

GOT2000

Back up multiple controllers

Ethernet

CC-Link IE Field Network

Inverter　Servo amplifier

Back up multiple controllers/ Automatic backup

Besides making backup of multiple controllers connected on Ethernet, you can specify a trigger device, a day of the week, and time for automatic backup to reduce the time needed to back up each controller separately.

* Not supported by GT21 and GS21.

Specification details and restrictions　　　　　　　　　　　　　* For the necessary option devices, please refer to the "Function list" (page 148).

● **Target models**　RCPU[1], QCPU (Q mode) (excluding Q12PRHCPU, Q25PRHCPU), LCPU, FX5CPU, FXCPU, motion CPU (MELSEC iQ-R Series/Q Series (SV13/SV22 only))[1], robot controller (FR Series (CR800-R (R16RTCPU), CR800-D), F Series (CR750-Q (Q172DRCPU), CR751-Q (Q172DRCPU), CR750-D, CR751-D), SQ Series CRnQ-700 (Q172DRCPU), SD Series CRnD-700)[1], CNC (C80, C70)[1], inverter (FREQROL-A800/A800Plus/F800 Series)[1][2], servo amplifier (MR-J4-□GF)[1][2]

[1]　Excluding R08SFCPU, R16SFCPU, R32SFCPU, R120SFCPU, R08PSFCPU, R16PSFCPU, R32PSFCPU, R120PSFCPU. Not supported by GT21 and GS21.

[2]　Supported only when the GOT and the programmable controller (RCPU, QCPU, LCPU) are connected via Ethernet and the programmable controller (RCPU, QCPU, LCPU) and the inverter/servo amplifier are connected via the CC-Link IE Field Network.

● **Supported connection types**[1]　Ethernet connection[2], direct CPU connection, CC-Link IE Field Network connection[3], serial communication connection, bus connection

[1]　For the details of connectable models of each connection type, please refer to the "Connectable model list" (page 152).

[2]　When the CC-Link IE Field Network Ethernet adapter module is used, the Backup/Restoration function cannot be used.

[3]　The connection type between the programmable controller and the inverter/servo amplifier.

● **Target data**　Programs, parameters, device comments, device initial values, file registers, etc.

Recommended industries

Automotive	SEMICON, LCD	Electronics
F & B	Pharma	Plant

Supported GOT types

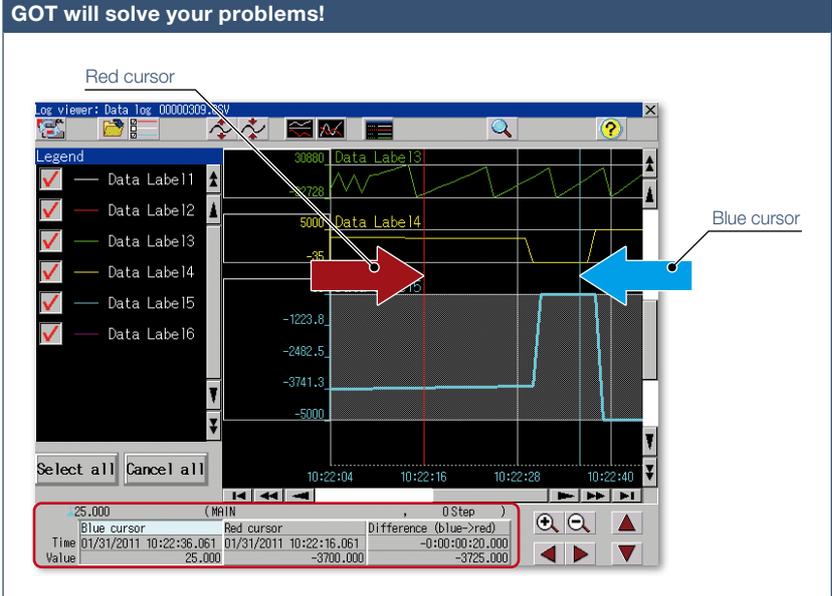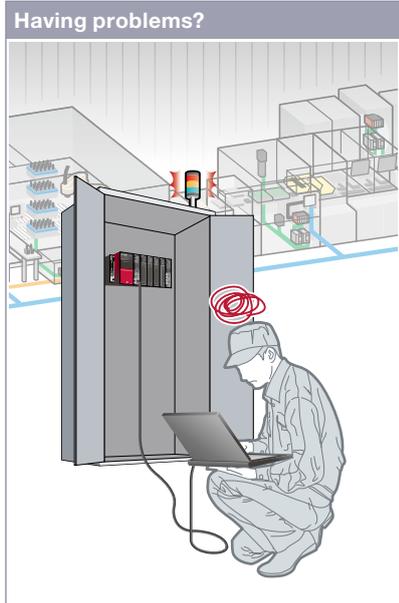| GT27	GT25	GT23
GT21*	GS21*	SoftGOT

* Excluding some models or restrictions apply to some functions. For the details, refer to the function descriptions above.

Supported devices

PLC	Servo	Inverter
	Robot	CNC

4

GOT Solutions - Maintenance, Troubleshooting and Diagnostics Features

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Check the PLC module status

Upgraded

Support
maintenance
work

■ System launcher function

Having problems?	GOT will solve your problems!

System configuration diagram

Icons show the module status.
You can check the module with
an error at a glance.

Extended function list screen
You can start the extended functions
that are supported by the module.

Select module

Programmable controller CPU
Q06UDEHCPU
- PLC diagnostics
- Device monitor
- Sequence program monitor (Ladder)
- Sequence program monitor (SFC)
- Backup/Restore
- iQSS utility

Motion controller
R64MTCPU
- R motion monitor
- R motion monitor (parameter setting)
- Drive recorder
- System launcher (servo network)

* See details on page 49

Can I check the status of the programmable controller system without a personal computer?

A graphical configuration diagram indicates module statuses. When you touch a module the extended function list is shown and you can carry out maintenance work efficiently.

Function features

The programmable controller system can easily be checked on GOT without a personal computer at the worksite.

Starting extended function quickly

When you touch a module in the system configuration diagram, the list of extended functions available to the module is shown.

Example of system launcher (servo network)

* See details on page 49

Checking module product information   NEW

The product information such as production number obtained from modules can be checked in a list.

Online module change function

GOT can direct a programmable controller to execute the online module change. (The applicable modules are listed below in this page.)

Specification details and restrictions

● **Target models**   RCPU, QCPU (Q mode), LCPU, motion CPU (MELSEC iQ-R Series/Q Series), CNC (C80, C70), robot controller (FR Series (CR800-R (R16RTCPU), CR800-Q (Q172DSRCPU)), F Series (CR750-Q (Q172DRCPU), CR751-Q (Q172DRCPU)), SQ Series CRnQ-700 (Q172DRCPU))

● **Supported connection types[1]**   Ethernet connection[2], direct CPU connection, serial communication connection, CC-Link IE Controller Network connection, CC-Link IE Field Network connection, CC-Link connection, bus connection, MELSECNET connection

[1] For the details of connectable models of each connection type, please refer to the "Connectable model list" (page 152).

[2] When the CC-Link IE Field Network Ethernet adapter module is used, the system launcher function cannot be used.

● **Extended functions that can be started from the system launcher**   Device monitor, sequence program monitor (iQ-R ladder/Ladder), sequence program monitor (SFC), network monitor, R motion monitor, Q motion monitor, intelligent module monitor, backup/restoration[1], motion SFC monitor, CNC monitor 2, CNC monitor, CNC data I/O, CNC machining program edit, iQSS utility, CC-Link IE Field Network diagnostics, drive recorder, system launcher (servo network), servo amplifier graph

[1] The CPU number setting is not transferred. Only the channel of the connected controller is in its selected state.

● **Modules applicable to online module change**   QCPU (Q mode) input/output/I/O module, analog input/output module, temperature input/temperature control module, loop control module, pulse input module

Recommended industries			Supported GOT types			Supported devices		
Automotive	SEMICON, LCD	Electronics	GT27	GT25	GT23	PLC	Servo	Inverter
F & B	Pharma	Plant	GT21	GS21	SoftGOT		Robot	CNC

4

GOT Solutions - Maintenance, Troubleshooting and Diagnostics Features

Graphically monitor the network status

■ CC-Link IE Field Network diagnostics

Having problems?

STOP!

GOT will solve your problems!

Ethernet

CC-Link **IE** Field

CC-Link IE Field Diagnostics screen

Where the error occurred is visible and easy to check

A problem occurred but it might take time to solve it in the large scale system.

Even in a large scale system that has a complex network configuration, the network status can be checked graphically so that line troubles and module errors can be identified quickly.

Function features

GOT can be used to check the devices in the CC-Link IE Field Network and identify the error in the network at a glance. If a problem occurs, you can quickly check where the error occurs and reduce downtime.

Checking event history

This window displays the history of network events and the event details. The event history can be output to a CSV file and used for trouble analysis in your office.

* Not available when the connection destination is an RCPU or FX5CPU.

Network event history window

Checking communication status of modules

The communication status can be checked for modules that are selected in the CC-Link IE Field Diagnostics screen. MAC address and IP address can also be checked.

Communication status monitor window

Specification details and restrictions

● **Target models**   RCPU, QCPU (Q mode), LCPU, FX5CPU, C Controller (MELSEC iQ-R Series/Q Series)
● **Supported connection types*1**   Ethernet connection*2, direct CPU connection*3, serial communication connection*4
*1 For the details of connectable models of each connection type, please refer to the "Connectable model list" (page 152).
*2 Connection to the Ethernet interface module of a programmable controller is not supported.
*3 RCPU and FX5CPU do not support direct CPU connection.
*4 FX5CPU does not support serial communication connection.

Recommended industries

Automotive	SEMICON, LCD	Electronics
F & B	Pharma	Plant

Supported GOT types

GT27	GT25	GT23
GT21	GS21	SoftGOT

Supported devices

PLC	Servo	Inverter
	Robot	CNC

Easy debugging

Support system
startup/
adjustment

■ FA transparent function

Having problems?	GOT will solve your problems!

It's bothersome to open the cabinet every time I setup or adjust the device. For the safety reason, I don't want to open the cabinet and change cable connections.

Without opening the cabinet and by only connecting a personal computer to the front USB interface on the GOT, you can use the GOT as a transparent gateway to enable programming, startup, and adjustment of industrial devices.

Function features

By connecting a personal computer to the front USB interface on the GOT, you can use the GOT as a transparent gateway to enable programming, startup, and adjustment of industrial devices. Users do not have to bother with opening the electrical cabinet or changing cable connections.

Transferring data via a programmable controller

Transfer data from a personal computer to the GOT2000 with a programmable controller acting as a gateway. Changing project data during startup or maintenance is now easier than ever.
* Not supported by GT21 and GS21.

Office   Project data   Worksite

Personal computer for programming and setup software

USB
Ethernet*4
Wireless LAN*1*2*3

Ethernet
CC-Link IE
Bus etc.

Mitsubishi Electric
programmable controller

Ethernet
CC-Link IE etc.

Ethernet
Direct CPU
connection

Mitsubishi Electric
programmable controller

Ethernet
RS-485

Mitsubishi Electric inverter

Ethernet
Direct CPU
connection
Bus

SSCNET III/H

Mitsubishi Electric
motion controller

Mitsubishi Electric
servo amplifier*5

*1 Not supported by GT2505, GT25 handy, GT23, GT21, and GS21.
*2 Installation of the wireless LAN communication unit (GT25-WLAN) is required on the GOT.
*3 For the countries where the wireless LAN communication unit can be used and other details, please refer to page 76.
*4 Not supported by GT2505, GT25 handy, GT23, GT21, and GS21 when the GOT is connected to controllers via Ethernet connection.
*5 GT21 and GS21 do not support connection to Mitsubishi Electric servo amplifiers.

Specification details and restrictions

● Supported devices, connection types, and compatible software   For the details, please refer to the relevant product manual.

Recommended industries			Supported GOT types			Supported devices		
Automotive	SEMICON, LCD	Electronics	GT27	GT25*	GT23*	PLC	Servo	Inverter
F & B	Pharma	Plant	GT21*	GS21*	SoftGOT		Robot	CNC

* Restrictions apply to some functions. For the details, refer to the function descriptions above.

4

GOT Solutions - Maintenance, Troubleshooting and Diagnostics Features

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Check status of industrial devices

■ Device monitor function

Having problems?	GOT will solve your problems!

I cannot do anything without a PC...

Entry monitor

T/C (timer, counter) monitor

Batch monitor

BM (buffer memory) monitor

How can I check the status of industrial devices without a personal computer?

GOT can be used to monitor or change device values of programmable controllers, motion controllers, robot controllers, or CNCs. The function is useful for starting up devices.

* For the details of supported devices and connection types, please refer to the relevant product manual.

Recommended industries

Automotive	SEMICON, LCD	Electronics
F & B	Pharma	Plant

Supported GOT types

GT27	GT25	GT23
GT21	GS21	SoftGOT

Supported devices

PLC	Servo	Inverter
	Robot	CNC

■ Network monitor function

Having problems?	GOT will solve your problems!

Cannot do anything without a PC?

Network monitor

Communication status monitor

Can I check the network status without a personal computer?

The network monitor function enables the GOT to monitor and display the status of the CC-Link IE Controller Network, CC-Link IE Field Network, MELSECNET/H network, and MELSECNET/10 network.

* For the details of supported devices and connection types, please refer to the relevant product manual.

Recommended industries

Automotive	SEMICON, LCD	Electronics
F & B	Pharma	Plant

Supported GOT types

GT27	GT25	GT23
GT21	GS21	SoftGOT

Supported devices

PLC	Servo	Inverter
	Robot	CNC

4

GOT Solutions - Maintenance, Troubleshooting and Diagnostics Features

Easily identify the cause of alarms

Support
maintenance
work

■ Alarm function

Having problems?

Worksite

Line A

Line B

⚠ **Error!**

GOT will solve your problems!

User alarm

Step 1   Line "A" stops

Step 2   Device "A" error

Step 3   Tank 1 out of material

Step 4   Troubleshooting

Line A

Line B

Worksite

An error occurred! How can I identify the location and quickly recover the problem?

Alarms are displayed with a station No. and CPU No. in the list grouped by system or level. It helps you to identify the location where the error occurred in a large system, leading to quick troubleshooting.

Function features

GOT displays communication errors (system alarms) of controllers and user-created alarms (user alarms).

Easily identify the cause of alarms [System alarm]

System alarms are displayed with additional information such as channel No., network No., station No., CPU No., screen No., and object ID. It helps you to identify the controller in which the error occurred and the cause of the alarm.
* Not supported by GT21 and GS21.

Alarms grouped by system or level [User alarm]

Alarms are displayed in the list grouped by system or level or all alarms are displayed in one list. You can easily check the detailed information of multiple alarms even in a large system, leading to quick troubleshooting.

Backup of alarm logs during power failure [System alarm/User alarm]

Alarm log data can be saved to a built-in SRAM even when the power supply has failed.
* Not supported by GT21 and GS21.

Interaction with other functions [User alarm]

Use of the alarm function combined with the logging and graph helps you to check the status when the alarm occurred and the status of the error found in the graph.

Interaction of user alarm and historical trend graph

Select an alarm from the list, and press the [Specified Jump] button

Display the graph recorded when the alarm occurred

Display the alarm of the specified time

Locate a cursor at the position of the error found in the graph, and press the [Specified Jump] button

Recommended industries

| Automotive | SEMICON, LCD | Electronics |
| F & B | Pharma | Plant |

Supported GOT types

| GT27 | GT25 | GT23 |
| GT21* | GS21* | SoftGOT |

* Restrictions apply to some functions. For the details, refer to the function descriptions above.

Supported devices

| PLC | Servo | Inverter |
| | Robot | CNC |

4

GOT Solutions - Maintenance, Troubleshooting and Diagnostics Features

Quick troubleshooting at worksite

Upgraded

Support maintenance work

■ Document display function

Having problems?	GOT will solve your problems!

⚠ **Error!**

Error B110

Error B110?

How can I recover from errors?

Save manuals, check sheets, etc. in SD memory card

Insert SD memory card to GOT

Check point at fuel error
1. In the case of Line A
   ● Check A fuel tank
   Procedures

2. In the case of Line B
   ● Check C and D tanks

GOT displays manuals or check sheets with instructions on how to restore the system, which reduces the downtime.

Function features

GOT displays various kinds of documents such as manuals. You can switch between pages, scroll, and zoom in/out a page for smooth viewing. Entering a page number easily displays the specified page among multiple pages in the manual.

Indirect specification of document ID or page number

You can switch displayed documents on one screen just by changing the document ID or the page number with objects such as touch switch or numerical input.

Viewing PDF files directly

PDF files can be viewed directly on GOT. With bookmark display and keyword searches, you can instantly check the information you want.

Bookmark display and keyword searches of PDF files

Document display screen

GT Designer3 (G Screen Design M

Bookmark display

Keyword search

Display the "Bookmark" window and move to the page you want to display from "Bookmark"

Display the search window and enter a keyword to move to a page containing the keyword

Specifying initial display page with keyword NEW

By specifying the initial display page with a keyword, the specified page automatically appears when using the document display function.

Supporting network drive NEW

The network drive can be used as the save destination for the document files to display. Data can be saved without considering the capacity limit.

Specification details and restrictions

● **Supported file formats**   PDF file, DocumentConverter output file[1] (doc, xls, ppt, pdf, jpg, bmp)

[1] Documents should be converted using DocumentConverter that is included in GT Works3.

Recommended industries			Supported GOT types			Supported devices		
Automotive	SEMICON, LCD	Electronics	GT27	GT25	GT23	PLC	Servo	Inverter
F & B	Pharma	Plant	GT21	GS21	SoftGOT		Robot	CNC

4

GOT Solutions - Maintenance, Troubleshooting and Diagnostics Features

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Quick troubleshooting from your office

■ GOT diagnostics function

Having problems?	GOT will solve your problems!

Worksite

?

Office

Error is occurring

I need to go and check the error

Worksite

Office

Ethernet
USB

Check the error and corrective actions at your office!

GT Works3

An error occurred at the worksite. I need to go and check the error quickly.

You do not need to visit the worksite. The status of GOT and CPU can be monitored using GT Works3 at your office. Check the error cause and corrective actions in detail, and you can solve the problem quickly.

Function features

Without having manuals, you can use GT Works3 and check the cause and corrective actions of system alarms* and script errors.
* Not supported by GT21 and GS21.

Checking system alarms*

GOT errors, CPU errors, net work errors, and corrective actions can be checked. Without using GX Works3/GX Works2, quickly check errors using GT Works3.
* Not supported by GT21 and GS21.

Checking script errors

The error cause and corrective actions of GOT script programs can also be checked, thus enabling efficient work of program fix and machine setup.

GOT internal device monitor

On GT Works3, you can monitor the GOT internal devices and change the device values as necessary.

Specification details and restrictions

● **Display contents**   System alarms*1 (GOT errors, CPU errors, network errors), script errors (project script, screen script, object script)
*1 Not supported by GT21 and GS21.

Recommended industries

Automotive	SEMICON, LCD	Electronics
F & B	Pharma	Plant

Supported GOT types

GT27	GT25	GT23
GT21*	GS21*	SoftGOT

* Restrictions apply to some functions. For the details, refer to the function descriptions above.

Supported devices

PLC	Servo	Inverter
	Robot	CNC

Support various international standards

Support system design

■ Compatible with environmental standards

Having problems?	GOT will solve your problems!
Worksite	GOT2000

I want to use an HMI which is designed to be safely used in hazardous locations.

GOT has been approved as the environmentally-resistant equipment, which means that the GOT can be used in various locations.

Function features

GOT is acceptable for use in hazardous locations classified by various safety standards (Class I, Division 2 [the United States, Canada], ATEX [Europe], KCs [Korea]).
Since GOT conforms to water, dust, and oil-proof IP67F standard, it is acceptable for use in areas where water or oil are present.
* GT25 rugged model conforms to IP66F.

Approved use in hazardous locations
GOT complies with safety standards of the United States, Canada, Europe, and Korea. (White model only)

Water, dust, and oil-proof
IP67F for the front surface. GOT is acceptable for use in areas where water or oil are present.
* GT25 rugged model conforms to IP66F.

Approval standards list (as of December 2019)

* For the latest information, please refer to the Mitsubishi Electric Factory Automation Global website (www.MitsubishiElectric.com/fa/).

○: Supported ×: Not supported

Approval standards			Standard model (panel color: black)	White model (panel color: white)		GT25 open frame model	GT25 wide model GT25 rugged model GT21 wide model
			GT27/GT25 GT23/GT21/GS21	GT27□□-□TWA GT25□□-□TWA	GT27□□-□TWD GT25□□-□TWD	GT25□□F-□TNA GT25□□F-□TND	GT2510-WXT□D GT2507-WT□D GT2507T-WTBD GT2107-WT□D
Mark	Overview	Country/ Region					
CE	EMC Directive harmonized standards, Low Voltage Directive harmonized standards, RoHS Directive harmonized standards	Europe	○	○	○	○	○
Ex	ATEX Directive harmonized standards[1]	Europe	×	×	○	×	×
UL	Safety standards	United States	○	○	○	○	○
	Class I, Division 2		×	○	○	×	×
cUL	Safety standards	Canada	○	○	○	○	○
	Class I, Division 2		×	○	○	×	×
KC	EMC standards	Korea	○	○	○	○	○
KCs	Safety standards[1]	Korea	×	×	○	×	×

[1] To comply with ATEX directive and KCs regulation, there are some restrictions. Please refer to the specification details and restrictions below.

Specification details and restrictions

● **Class I, Division 2**   This classification means that the equipment has been approved for use in Class I, Division 2 hazardous locations.
● **ATEX directive and KCs regulation**   GOT is acceptable for use in hazardous locations classified by these safety standards. To comply with the ATEX directive and KCs regulation, protective sheet and special fitting in the "Product list" are required separately. (Only protective sheet is required for GT2508-VTWD.) Communication units and option units cannot be used. When using these units, GOT does not comply with the standards. For the details, please refer to the Technical Bulletin "GOT2000 Series in Compliance with the ATEX Directive and KCs Certification Requirements" (No. GOT-A-0101) on the Mitsubishi Electric Factory Automation Global website.
● **IP67F**   To conform to IP67F, close the USB environmental protection cover by pushing in the [PUSH] mark or [PULL] mark firmly to lock the cover[1]. Note that the structure does not guarantee protection in all users' environments. The GOT may not be used in certain environments where it is subjected to splashing oil or chemicals for a long period of time or soaked in oil mist.
[1] Open frame models conform to IP67F with the environmental protection sheet attached.

Wireless communication between GOT and PC

Support system design

■ Wireless LAN communication unit

| Having problems? | GOT will solve your problems! |

Mitsubishi Electric programmable controller

Wireless LAN access point*3

Install the wireless LAN communication unit (GT25-WLAN) on the GOT

No cables to connect GOT and a personal computer...

How do I connect GOT and a personal computer without using a cable?

The wireless LAN connection between GOT and a personal computer is supported.*1*2*3 Project data transfer, FA transparent function, GOT Mobile function, and other functions can be used.

*1 Installation of the wireless LAN communication unit (GT25-WLAN) is required on the GOT.
*2 Not supported by GT2505, GT23, GT21, and GS21 because the wireless LAN communication unit cannot be installed on these models.
*3 Access point mode is supported by GT Works3 Ver.1.144A or later. No access point is required separately for direct communication between GOT and mobile devices.

Specification details and restrictions   * For the necessary option devices, please refer to the "Function list" (page 148).

● **Use in wireless LAN connection**   Data transfer in the wireless LAN communication may not be as stable as that in the cable communication. A packet loss may occur depending on the surrounding environment and installation location. Make sure to check that it operates properly before using.
● **Country applicable to wireless LAN communication unit**   The wireless LAN communication unit with hardware version A can be used only in Japan.
The unit with hardware version B or later can be used in Japan (Japan Radio Law), the United States (FCC standards), the EU member states, Switzerland, Norway, Iceland, and Liechtenstein (RE Directive). The unit with hardware version D or later can be used in Japan, the United States, the EU member states, Switzerland, Norway, Iceland, Liechtenstein, China (excluding Hong Kong, Macau, Taiwan), and Korea.

Recommended industries

| Automotive | SEMICON, LCD | Electronics |
| F & B | | |

Supported GOT types

| GT27 | GT25* | GT23 |
| GT21 | GS21 | SoftGOT |

* Excluding GT2505. For the details, refer to the function descriptions above.

Design secure network configuration

Support system design

■ Ethernet communication unit

| Having problems? | GOT will solve your problems! |

Worksite   Office

HUB

Information system network
Office

Error!

Control system network
Worksite

Communication continues

Ethernet

I want to separate the network for security reason.

Two Ethernet ports physically separate the information system network in the office from the control system network at the production site; therefore the network architecture is more reliable and secure.

* Installation of the Ethernet communication unit (GT25-J71E71-100) is required on the GOT.
* GT25 wide models have two Ethernet ports as standard so that the Ethernet communication unit is not required.
* Not supported by GT2505, GT23, GT21, and GS21 because the Ethernet communication unit cannot be installed on these models.

Specification details and restrictions   * For the necessary option devices, please refer to the "Function list" (page 148).

● **To use Ethernet communication unit**   To use the Ethernet communication unit, the BootOS version Z or later is required. Because the unit cannot be used depending on the connection destination, please refer to the GOT2000 Series Connection Manual.

Recommended industries

| Automotive | SEMICON, LCD | Electronics |
| F & B | Pharma | Plant |

Supported GOT types

| GT27 | GT25* | GT23 |
| GT21 | GS21 | SoftGOT |

* Excluding GT2505. For the details, refer to the function descriptions above.

4

GOT Solutions - Hardware Features

Implement the sound notification system easily

■ Sound output function

Having problems?	GOT will solve your problems!

Having problems?

I didn't notice that it stopped working.

Time to replace the part.

GOT will solve your problems!

♪♪♪♪ (sound effect)

Time to replace the part.

Screen saver enabled

Workpiece is stuck. Please remove the workpiece.

How can I check the equipment status from a remote location?

GOT can be used to output sound data. Outputting a notification sound can reliably convey the information to the operators who are working away from the GOT. It is also usable while screen saver is active.

Function features

The sound can be output* from the audio equipment such as a speaker that is connected to GOT. The sound can be played when the trigger action or time action conditions are satisfied or touch switches are touched.

* GT25 wide models have a built-in sound output interface so that the sound output unit (GT15-SOUT) is not required. The unit is required for other models.
* Not supported by GT2505.
* To output sound, it is required to create sound files.

Sound files can be created easily (See page 118)

There are three types of sound files: messages, sound effects, and melodies. Messages can easily be created by using the speech synthesis function* (page 118). Sound effects and melodies are included in GT Works3 so that you can reduce time for system design.

* GT Works Text to Speech License (SW1DND-GTVO-M) is required separately.

Sound files

Message	Sound effect
Create from arbitrary text	More than 50 files are included

Melody
More than 10 files are included

Cancel or mute the sound while it is being played back

After checking the situation, you can stop or mute the sound while it is being played back so that you do not need to worry about annoying other operators.

An error occurred. Please check workpiece in process A…

Cancel

Checked, OK!

Specification details and restrictions   * For the necessary option devices, please refer to the "Function list" (page 148).

● **Unit installation**   GT25 wide models have a built-in sound output interface so that the sound output unit (GT15-SOUT) is not required. The unit is required for other models.
● **Sound file specifications**   Sound file format: WAV format, sampling frequency: 8.000 kHz/16.000 kHz, channel number: 1 channel (monaural)
● **Applicable plug**   φ3.5 stereo mini-plug (3-prong)

Recommended industries

Automotive	SEMICON, LCD	Electronics
F & B	Pharma	Plant

Supported GOT types

GT27	GT25*	GT23
GT21	GS21	SoftGOT

* Excluding GT2505. For the details, refer to the function descriptions above.

Record/Playback videos to see what happened at worksite

Support system design

■ Multimedia function

Having problems?	GOT will solve your problems!

STOP!

Attach a video camera to the GOT to record the operational status on the production line

Play the video on the alarm display screen

Alarm display screen
10/01/2013 10:00 Error B110
10/01/2013 10:10 Error B112
10/01/2013 9:55 Error B110
Video search

<Record 120 seconds before and after error occurred>

Error

120 -seconds- before

120 -seconds- after

Production line has stopped due to machine errors! It's difficult to identify the cause of the error on the unattended line.

GOT records the operational status on the production line and plays back the recorded video image. Visual clarity of the image helps you to analyze the cause of the error.

Function features

GOT displays and records the image taken by a video camera connected to the multimedia unit and plays back the saved video image.
To set the timing of recording, you can use a device of a controller as a trigger.
* Excluding GT2705.
* Multimedia unit (GT27-MMR-Z) and CF card are required.

Use a personal computer to play back the video recorded by the GOT

Video file

Office

Ethernet

Worksite

Video file

Play back the video on the GOT at worksite

Display the file name and the recorded date and time of the currently played video

---

Specification details and restrictions   * For the necessary option devices, please refer to the "Function list" (page 148).

● Recording specifications
Before-after event recording   This allows the recording of a total of 240 seconds of images, including 120 seconds before and after a system error occurs. (When event trigger device turns on).
Standard mode   This allows two types of recording modes: Recording size VGA (640 × 480), frame rate maximum 15fps; Recording size QVGA (320 × 240), frame rate maximum 30fps.
Long-time mode   This allows the recording for long hours of approximately two days. Recording size QVGA (320 × 240), frame rate 15fps.
● **Unit installation**   One of the following units can be installed: multimedia unit, video input unit, digital video output unit, RGB input unit, video/RGB input unit, or RGB output unit.

Recommended industries			Supported GOT types			Supported devices		
Automotive	SEMICON, LCD	Electronics	GT27*	GT25	GT23	PLC	Servo	Inverter
F & B	Pharma		GT21	GS21	SoftGOT		Robot	CNC

* Excluding GT2705. For the details, refer to the function descriptions above.

Monitor worksite using video images

Upgraded

■ Video display/RGB display/Video output function

Having problems?

GOT will solve your problems!

Multiple images can be displayed on one GOT

GOT screen   Camera image   PC image

There is not enough space for multiple monitors at the worksite.

GOT acts as a monitor to display images which are recorded by a video camera or saved in a personal computer, and thus there is no need to have additional monitors.

Function features

GOT acts as a monitor to display images which are recorded by a video camera or saved in a personal computer.

* Excluding GT2705.

Video input

Input images of up to 4 video cameras can be simultaneously displayed on the GOT. You can zoom in or zoom out the images and save the GOT images (hard copy images).

* Video input unit (GT27-V4-Z) or video/RGB input unit (GT27-V4R1-Z) is required.

RGB input*1

RGB images can be displayed on the GOT. Simultaneous display of two screens is also possible*2. You can use various effects for the images such as rotation, and gesture operations can be used for zooming in/out (400%) and scrolling objects*2.

*1 RGB input unit (GT27-R2) or video/RGB input unit (GT27-V4R1-Z) is required.
*2 Supported by GT27-R2 only.

RGB output

The GOT screen can be displayed on a commercially available large display even when the backlight of the GOT is off.

* RGB output unit (GT27-ROUT) is required.

HDMI output NEW

Connect an HDMI compatible monitor and display GOT screens on the large monitor. Since the GOT screen can be displayed on a large monitor, it is recommended for ANDON applications.

* Digital video output unit (GT27-VHOUT) is required.

By creating a base screen larger than the resolution of GOT, high resolution screen that fits the external monitor can be displayed. (For the details, see page 88)

Specification details and restrictions

● **Unit installation**   One of the following units can be installed: multimedia unit, video input unit, digital video output unit, RGB input unit, video/RGB input unit, RGB output unit
● **Applicable peripheral devices**   For the details, please refer to the Technical Bulletin No. GOT-A-0064 on the Mitsubishi Electric Factory Automation Global website
(**www.MitsubishiElectric.com/fa/**).

Recommended industries

Automotive	SEMICON, LCD	Electronics
F & B	Pharma	Plant

Supported GOT types

GT27*	GT25	GT23
GT21	GS21	SoftGOT

* Excluding GT2705. For the details, refer to the function descriptions above.

Supported devices

PLC	Servo	Inverter
	Robot	CNC

Quick changeover

Upgraded

Support system operation

■ Recipe function

Having problems?	GOT will solve your problems!

How can I change the recipe information such as material blend and machine conditions?

		D2000	D2001	D2002
Record 1	Vegetable curry	300	0	0
Record 2	Chicken curry	0	300	0
Record 3	Seafood curry	0	0	150

GOT saves recipe information for individual product. You can select a recipe to be written to the programmable controller, which achieves the quick changeover for the production line.

Function features

GOT saves the recipe information (device values) such as material blend and machine conditions. You can change the recipe on the GOT and write it to a programmable controller to quickly perform the changeover.

Checking record values before recipe change

Without writing records to programmable controllers, record values can be checked and changed. By overwriting a recipe file with the changes, the changed values can be written to devices in programmable controllers. (Recipe special control)
* Not supported by GT21 and GS21.

Recipe function can be used without data storage NEW

Data storage or SRAM user area can be specified as the save destination of recipe data.

Easy changeover

Changing recipes (changeover) is easy on a user-created screen[*1] or on the utility screen.

Change recipes in the utility screen	Change recipes from user-created screens[*1]	
	Recipe operation window	Recipe display (record list)
Secured by setting passwords to activate the utility screen.	Without creating recipe change screen, recipes can be changed by using a standard recipe operation window.	Record selection screen can be created by the users. Various functions and designs are available.

*1 Changing recipes on a user-created screen is not supported by GT21 and GS21.

Specification details and restrictions   * For the necessary option devices, please refer to the "Function list" (page 148).

● **Supported device formats** Bit, BIN, BCD, Real, String
● **Supported formats of recipe file conversion** CSV file, Unicode® text file

Recommended industries	Supported GOT types	Supported devices

Automotive	SEMICON, LCD	Electronics
F & B	Pharma	Plant

GT27	GT25	GT23
GT21*	GS21*	SoftGOT

PLC	Servo	Inverter
	Robot	CNC

* Restrictions apply to some functions. For the details, refer to the function descriptions above.

Support recipe setting (record) selection

Support system
operation

■ Recipe display (record list)

Having problems?	GOT will solve your problems!

GT Works3

Create the list
from the recipe
setting dialog

Select your favorite style
from the preset list and
easily create appropriate
screen!

Easy to view recipe display

Can I select a
recipe from the
list?

I want to select
recipe by name,
not by number.

How can I change recipes easily on a
user-created screen?

Recipe names (record names) are displayed in a list format on GOT. Sort or narrow
down the list and easily change recipes on GOT.

Function features

Create the recipe display (record list)
easily just by selecting required items
in GT Works3. Colors, line styles, and
borders can be changed as you need.

Read and write records

Just select a record and touch a switch
on GOT and you can easily read or write
records.

Change display order of records

Records can be sorted by record number
or record name by touching the column
header.

Change or delete record names

Change record names or delete records
by specifying the record name using
numerical input.

Touch and sort records

Scroll the list by gesture
operation

Colors, line styles, and borders can be changed
as you need!

Touch switches for various recipe operations

Specification details and restrictions

● **Customizable settings**   Text color, background color, cursor color, ruled line color, line type, line width, show/hide scrollbar, etc.
● **Functions that can be used with recipe display (record list) object**   Read/write records, delete records, verify records, change/sort/filter record names, export/import
recipe data
● **How to obtain sample screens**   Sample screens are included in GT Works3. For the details, please contact your local sales office.
The sample screens are supported by the following GT Works3 versions: Ver.1.155M or later.

Recommended industries			Supported GOT types			Supported devices		
Automotive	SEMICON, LCD	Electronics	GT27	GT25	GT23	PLC	Servo	Inverter
F & B	Pharma	Plant	GT21	GS21	SoftGOT		Robot	CNC

4

GOT Solutions - Security & Additional System Features

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Increase efficiency of maintenance work

Support system operation

■ Writing resource data

Having problems?	GOT will solve your problems!

Having problems?

I have to correct a recipe file now.

GOT will solve your problems!

		Red beans	Curry
		D2000	D2001
Record 1	Red bean bread	50	0
Record 2	Curry bread	30	0

Read recipe file

Office

Edit on a personal computer

Write the edited recipe file

		Red beans	Curry
		D2000	D2001
Record 1	Red bean bread	50	0
Record 2	Curry bread	0	30

How can I correct recipe files in GOT without visiting the worksite?

Recipe files read from GOT can be edited and written back to an SD memory card in the GOT. Without ejecting the SD memory card, you can read, edit, and write recipe files in your office.

Function features

Resource data (alarm log file, recipe file, logging file, operation log file, image file, and so on) can be written to GOT. There is no need to eject and insert an SD memory card.

Easy to edit the public folder of the GOT Mobile function

PDF and other files can be directly written to the public folder of the GOT Mobile function. Updating the public folder is easy as well.

Read the resource data

Edit the read resource data

Write the resource data

Specification details and restrictions

● **Transferable resource data**   The data that can be transferred differ depending on the GOT model. In addition, the resource data cannot be written depending on the data type. For the details, please refer to the GT Designer3 (GOT2000) Screen Design Manual.

Recommended industries

Automotive	SEMICON, LCD	Electronics
F & B	Pharma	Plant

Supported GOT types

GT27	GT25	GT23
GT21	GS21	SoftGOT

Supported devices

PLC	Servo	Inverter
	Robot	CNC

Protect valuable assets

■ Various security functions

Having problems?	GOT will solve your problems!

Access restriction via network
→ IP filter function

Ethernet

Display and operation restriction
→ Operator authentication function

Project data execution restriction
→ Security key authentication function

Project data access restriction
→ Security key authentication function

The following security functions are also available.
• Restrictions on reading data from GOT
• Restrictions on users who open project data

I know the importance of security functions to protect valuable assets, but how can I do...?

To protect customers' assets, GOT offers enhanced security functions such as access restriction on project data and access restriction via network.

Function features

Security key authentication function and IP filter function offer enhanced security.

Prevent data alteration and duplication [Security key authentication function]

On the GOTs and personal computers without registered security keys, the project data cannot be opened and executed, which protects your techniques (know-how) from information leaks.
* Not supported by GT21 and GS21.

Reduce risk of unauthorized access through network [IP filter function]

Registering the IP address of the device which can access the GOT restricts the access from unauthorized devices.

Security key authentication function

Restrict PCs on which project data can be opened	Restrict GOTs on which project data can be executed

Project data

Cannot open

Project data

Cannot execute

IP filter function

Register the IP address of the device to allow access	Register the IP address of the device to prohibit access

Ethernet

Access not accepted

Allowed IP address   Unregistered IP address

Ethernet

Access not accepted

Prohibited IP address   Unregistered IP address

Recommended industries

Automotive	SEMICON, LCD	Electronics
F & B	Pharma	Plant

Supported GOT types

GT27	GT25	GT23
GT21*	GS21*	SoftGOT

* Restrictions apply to some functions. For the details, refer to the function descriptions above.

Supported devices

PLC	Servo	Inverter
	Robot	CNC

Identify error cause based on history information

Upgraded

■ Operation log function

Having problems?	GOT will solve your problems!
⚠ Error!	**Operation log list** **Detailed information**

Operation log list

Check the brief information of the log

Detailed information

for more details...

Check the detailed information of the log

An error occurred due to improper operations, but I do not exactly know why the error occurred...

GOT records all the operations performed by operators. Checking the recorded operation history helps you to identify and analyze the cause of the error occurred due to improper operations, leading to making improvements, preventing reoccurrence, and enhancing traceability.

Function features

GOT records the operation information, such as the "what, when, and how" of an operation performed, in chronological order in an SD memory card or USB memory.
Use of the operation log function combined with the operator authentication function (page 85) records additional information of "who" performed the operation.

Easy management for operation log file

You can copy and delete an operation log file created by the operation log function and change a file name on GOT without using a personal computer.
The operation log file can be converted into a CSV file or Unicode® text file so that the file can be checked on the personal computer.

Coordination with user-created management systems NEW

The operation log records not only the operator names that are used in the operator authentication function but also the character strings stored in an external device. It is easy to coordinate your own user management system and the GOT's operation log.

User information inside company

Store user information to devices

User: AB1239
PASS: XYZ
Level: 3

Login screen
User ID   AB1239
Password   *******
Login

Quick check of operation log file

You can select a log from the operation log list and check the detailed information. Screen images also help you to identify the improper operation.

* For the necessary option devices, please refer to the "Function list" (page 148).

Recommended industries			Supported GOT types			Supported devices		
Automotive	SEMICON, LCD	Electronics	GT27	GT25	GT23	PLC	Servo	Inverter
F & B	Pharma	Plant	GT21	GS21	SoftGOT		Robot	CNC

Security with password management

■ Operator authentication function

Having problems?	GOT will solve your problems!

GOT will solve your problems!

◎ Operation authorized → Login OK → **Operation screen is displayed**

× Operation unauthorized → Login failed → **Operation screen is not displayed**

How can I restrict the unauthorized operators?

Operator name and password enable the secure login management in a large-scale worksite, providing the flexibility of setting the operation authority per worksite or operator. In addition, the login management can be performed by an external authentication device such as RFID.

Function features

Setting the operation authority and the viewing authority achieves "enhanced security" and allows "access management per operator". Use of the operator authentication function combined with the operation log function (page 84) enables you to check the "who, what, when, and how" of an operation performed.

Enhanced password security

By setting password requirements (the minimum number of characters and the character types), you can set more advanced passwords. It is possible to prompt a password change at the initial login or notify the password expiration date in advance (1 day to 30 days).
* Not supported by GT21 and GS21.

How to authenticate the operator

Method ①

Input an operator name and password for login

Method ②

Use an ID card or ID tag for login

Use of method ① combined with method ② is acceptable. Secure login management is achieved even when an external authentication device has failed.

Settings for operation authority

Set the authority to allow John Smith to adjust "Torque 1" and "Torque 2".

John Smith can adjust "Torque 1" and "Torque 2".

John Smith cannot adjust "Torque 3".

* For the necessary option devices, please refer to the "Function list" (page 148).

Recommended industries

Automotive	SEMICON, LCD	Electronics
F & B	Pharma	Plant

Supported GOT types

GT27	GT25	GT23
GT21*	GS21*	SoftGOT

* Restrictions apply to some functions. For the details, refer to the function descriptions above.

Supported devices

PLC	Servo	Inverter
	Robot	CNC

Saving files in network drive

NEW

Support system
operation

■ Network drive

Having problems?	GOT will solve your problems!

Having problems?

Programmable controller

Temperature controller

SD memory card, etc.

Buffering area
(Memory on GOT)

⚠ **Storage space is insufficient**

GOT will solve your problems!

File server

Network drive

Shared folder

Data can be saved directly

Ethernet

As the size of the logging files and other data saved in the GOT increases, the memory capacity soon becomes insufficient.

Since GOT files can be saved directly to the shared folder on the file server (personal computer) connected by Ethernet, data can be accumulated without considering the capacity limit.

Function features

The network drive can be used as the save destination for the GOT files. By setting the shared folder on the file server (personal computer) connected by Ethernet as the network drive, the files can be saved directly to the shared folder from the GOT. Use the external storage to accumulate data without considering the capacity limit.

Saving all data to file server

Since files can be saved directly to the file server from multiple GOTs, you can view necessary data just by accessing the server.

File server

192.168.3.18
192.168.3.19

Data saved in the file server can be viewed and analyzed on a personal computer

Ethernet

Data*1

GOT2000

GOT2000

192.168.3.18

192.168.3.19

*1 For the functions that can use the network drive, please refer to the specification details and restrictions below.

Specification details and restrictions

● **File server**　File servers must support the file sharing function (SMB or CIFS). For recommended file servers, please refer to the relevant product manual.

● **Functions that can use network drive**　Document display, logging, hard copy, file printing, report, file transfer function (FTP transfer), file transfer function (GOT internal transfer), file management function

● **Using network drive on multiple GOTs**　When the file save destination setting is common to multiple GOTs, select [Separate destinations for each GOT] in the setting dialog for the function using the network drive. A folder named as the GOT's IP address is created automatically and the files can be prevented from being overwritten.

Recommended industries

Automotive	SEMICON, LCD	Electronics
F & B	Pharma	Plant

Supported GOT types

GT27	GT25	GT23
GT21	GS21	SoftGOT

Supported devices

PLC	Servo	Inverter
	Robot	CNC

Printing stored data all at once

Support system operation

`Upgraded`

■ Printing hard copies and reports

Having problems?	GOT will solve your problems!

The ink has run out.

Report

The ink has run out and hard copy and report data have not been printed.

The ink has been replaced. Paper stock is ready.

Print all reports at the end of the day.

How can I make the printer ready and then print data all at once?

Files created in the hard copy function or report function can be printed on a printer. When printing reports, the data can be temporarily stored in an SD memory card or other data storage and printed all at once.

Function features

The hard copy data captured while running GOT or the collected report data can be printed.

Printing reports at an arbitrary timing

The timing to output reports is as follows. Triggers to output data can be set for each report screen.

Supported printer*1

• Serial printer
• PictBridge-compatible printer*2
• Ethernet printer*3 `NEW`

*1 For the supported printer models, please refer to the Technical Bulletin No. GOT-A-0064 on the Mitsubishi Electric Factory Automation Global website.
*2 Not supported by GT2505, GT25 wide, GT25 handy, GT25 rugged, GT23, GT21, and GS21.
*3 Supported by GT2104-R and GT2103-PMBD among GT21.

GT27 model, GT25 model, GT23 model

• When trigger condition is satisfied `NEW`
  Stores the collected data into a temporary file, and collectively outputs the data to a report when the output trigger condition is satisfied.
• At the time of data collection (only when using a serial printer)
  Outputs the collected data to a report simultaneously with data collection.

GT21 model, GS21 model

• At the time of data collection (only when using a serial printer)
• When one page's worth of data is collected (only when using an Ethernet printer)

SoftGOT

• When trigger condition is satisfied `NEW`

Recommended industries

Automotive	SEMICON, LCD	Electronics
F & B	Pharma	Plant

Supported GOT types

GT27	GT25*	GT23*
GT21*	GS21*	SoftGOT

* Restrictions apply to some functions. For the details, refer to the function descriptions above.
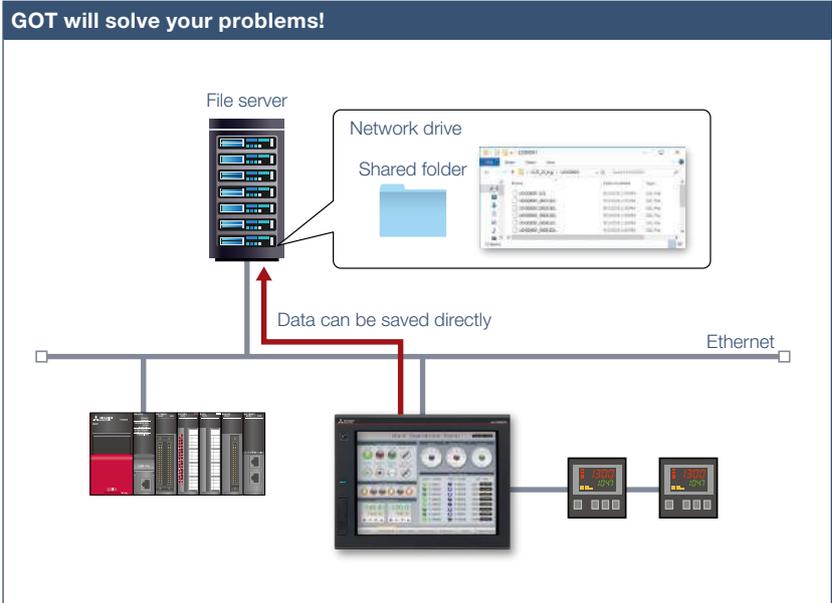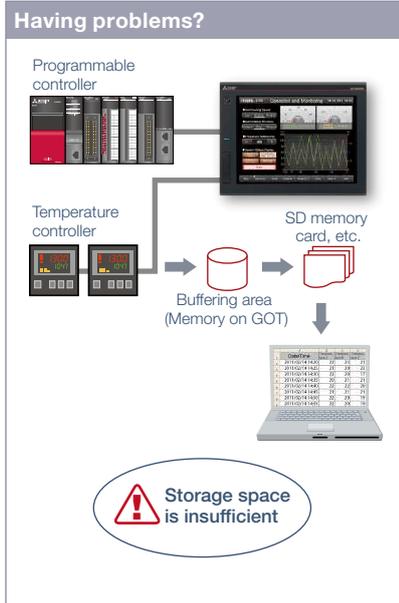
Supported devices

PLC	Servo	Inverter
	Robot	CNC

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GOT Solutions - Security & Additional System Features

More information on a single screen

Support system operation

NEW

■ Base screen size expansion

Having problems?	GOT will solve your problems!

Scroll the screen and view other parts of the screen

I want to check the information on another screen at the same time.

Can I check all necessary information on one screen without switching screens?

A base screen that is larger than the resolution of GOT can be created and displayed. By displaying the information that used to be separated in multiple base screens, operation can be performed while viewing the whole image.

Function features

A base screen that is larger than the resolution of GOT can be created and displayed. The screen of expanded size can easily be scrolled by using swipe gestures or the scroll bars.

* Supported by SoftGOT only when using the SoftGOT-GOT link function.

Example)
Displaying an expanded base screen (1600 × 960) on GT27-V (640 × 480)

Expanded base screen (1600 × 960)

A B C D E
F G H I J

View on the GOT

A B → Scroll → I J

Operation while viewing the whole image

The navigation window can be displayed on GOT to indicate the current position on the base screen. The window is semi-transparent and displayed in small size to help you view the whole image during operation.

The window display can be changed depending on the setting (always display, do not display, or display while swiping/ touching the screen).

Red frame

Blue frame

Red frame: Indicates the area currently displayed on the GOT.
Blue frame: Indicates the position of the object where the cursor is located. The frame appears when the cursor moves to any object that is hidden from view. The area enclosed in the frame blinks in yellow.

Specification details and restrictions

● **Graphics setting**   GOT Graphic Ver.2 must be selected.
● **Restrictions of other functions**   This function cannot be used with the screen gesture function.

Recommended industries			Supported GOT types			Supported devices		
Automotive	SEMICON, LCD	Electronics	GT27	GT25	GT23	PLC	Servo	Inverter
F & B	Pharma	Plant	GT21	GS21	SoftGOT*		Robot	CNC

* Restrictions apply to some functions. For the details, refer to the function descriptions above.

Quickly change comments

Support system operation

NEW

■ Changing comments without using GT Designer3

Having problems?

A typo was found on the screen.

STOR

GT Designer3 is not installed...

GOT will solve your problems!

Text file for comments

Comment No.	Column No.1
1	STOR→STOP
⋮	⋮

Edit the comment text file on a personal computer (text editor)

Restart GOT and fix the correction

STOP

Overwrite with the text file for comments

After starting operation, a typo was found on the screen. I need to correct it but there is no personal computer here that has GT Designer3 installed.

Even if GT Designer3 is not installed on the personal computer, comments can be edited and the changes can be reflected to GOT immediately. It helps to apply minor changes to comments without editing the project data.

Function features

The GOT can display comments by reading a comment text file from the installed data storage. After changing a comment, overwrite the comment text file in the data storage and restart the GOT to display the new comment.

* To display comments from a text file, configure the relevant settings in the project data. For the details, please refer to the GT Designer3 (GOT2000) Screen Design Manual.
* USB memory or SD memory card is required.

Writing package data and the comment text file

Changing comments

Package data   Text file for comments

STOR

Personal computer (GT Designer3)
• Creating a project
• Exporting comments to a text file

GT Designer3 is not required

Text file for comments

Restart the GOT

STOP

Text file for comments

Personal computer (text editor)
• Editing the comment text file

Specification details and restrictions

● **Influence on the GOT startup time**   When this function is used, the GOT reads a comment text file at startup, resulting in a longer startup time. To minimize the increase of the startup time, enable this function only for the comment group in which comments may be changed.

● **Font restrictions**   Windows® fonts and HQ fonts are not usable to display the comments of a text file. Even if a Windows® font or HQ font is specified in the object setting dialog, the GOT displays the comments in a standard font.

Recommended industries

Automotive	SEMICON, LCD	Electronics
F & B	Pharma	Plant

Supported GOT types

GT27	GT25	GT23
GT21	GS21	SoftGOT

Supported devices

PLC	Servo	Inverter
	Robot	CNC

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GOT Solutions - Security & Additional System Features

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Support FDA 21 CFR Part 11

Support system operation

■ Regarding FDA 21 CFR Part 11 support

Having problems?	GOT will solve your problems!
Is there any way to support FDA 21 CFR Part 11...	Operator authentication screen → Login → Operation screen

How can I support FDA 21 CFR Part 11 easily?

GOT can be used to make your system meet the requirements of FDA 21 CFR Part 11.

* The users must construct an appropriate system for the compliance with the FDA 21 CFR Part 11. For the details, please refer to the Technical Bulletin No. GOT-A-0077 on the Mitsubishi Electric Factory Automation Global website.

Function features

GOT can be used to support FDA 21 CFR Part 11, the standards about electronic data recording of the traceability information, which is required in the food and pharmaceutical industries. Sample screens are available for helping you configure systems.

GOT functions related to FDA 21 CFR Part 11

(1) **Managing users who access the GOT**
Operator authentication and security level setting
(2) **Managing screen data**
User management, access control
(3) **Completeness of data**
Network drive, FTP client, FTP server
(4) **Security and viewing of data**
Operation log, alarm, logging, recipe
(5) **Audit trail**
Operation log
(6) **Validation of data and operations**
Verification (GT Designer3 function)
(7) **System development, operation, and management**
Security level setting

Access management per operator

The operator authentication function enables management of users who can login to GOT. (For details, see page 85.)

* To prevent impersonations, user accounts should be managed thoroughly by the users.

Operator authentication screen

Input an operator name and password for login

Recording audit trails (histories for the follow-up survey later)

Audit trails can be recorded and operated by setting the operation log appropriately. (For details, see page 84.)

<Information required to be recorded>
· Time stamp
· User name of the logged-in operator
· Description and details of the operation performed by the operator
  (logs before and after the data change)

Operation log list

Operator names stored in programmable controller devices can be used, thus enabling interaction with user management systems. **NEW**

For more details

Specification details and restrictions

● **Range of supporting FDA 21 CFR Part 11**   The range that GOT can support the regulation is limited. For the details, please refer to the Technical Bulletin No. GOT-A-0077 on the Mitsubishi Electric Factory Automation Global website (**www.MitsubishiElectric.com/fa/**).
● **How to obtain sample screens**   Sample screens are included in GT Works3. For the details, please contact your local sales office. The sample screens are supported by the following GT Works3 versions: Ver.1.152J or later.

Recommended industries

F & B   Pharma

Supported GOT types

GT27	GT25	GT23
GT21	GS21	SoftGOT

4

GOT Solutions - Security & Additional System Features

Easy data collection

Upgraded

■ Logging & Graph/List

Support system
operation

Having problems?	GOT will solve your problems!

Graph display

List display

GOT logs the data

Temperature

Product quantity

Setting value, etc

GOT2000

Cursor Position
03/07/18
16:20

Defective product… I need to quickly identify the cause of errors.

GOT collects the data from programmable controllers and temperature controllers (logging*) and displays the collected data in a graph and list. You can check the data which was collected when an error occurred to identify and analyze the cause of the error.
* Excluding GT2103-PMBLS.

Function features

GOT collects the data from programmable controllers and temperature controllers and displays the collected data in a graph and list. The logging data can be saved in a built-in SRAM* even when the power supply has failed.
* Not supported by GT21 and GS21.

Analyze data on personal computer

The logging data can be converted into a CSV file or Unicode® text file and saved to an SD memory card or USB memory so that the data can be displayed on a personal computer.

Historical trend graph

The data collected by the logging function is displayed in a graph in chronological order. Scrolling the graph and specifying the time make it easier to check the necessary data.

Historical data list

The data collected by the logging function is displayed in a list. Specifying the time in the list displays the historical trend graph of the specified time.

Supporting network drive NEW

The network drive can be used as the save destination for logging files. Data can be saved without considering the capacity limit.
* Not supported by GT23, GT21, and GS21.
* For the details, please refer to page 86.

File server
(personal computer)

View and analyze data
on personal computer

Save data

Ethernet

Buffering area
(Memory on GOT)

SD memory card,
etc.

Specification details and restrictions

● Supported device formats   Bit, BIN, BCD, Real, String

* For the necessary option devices, please refer to the "Function list" (page 148).

Recommended industries

Automotive	SEMICON, LCD	Electronics
F & B	Pharma	Plant

Supported GOT types

GT27	GT25	GT23
GT21*	GS21*	SoftGOT

* Restrictions apply to some functions. For the details, refer to the function descriptions above.

Supported devices

PLC	Servo	Inverter
	Robot	CNC

4

GOT Solutions - Security & Additional System Features

91

Simple touch operations

Support system operation

■ Gesture function

Having problems?	GOT will solve your problems!

Easier operation on a magnified screen

Zoom

Scroll

It's hard to touch small parts on the screen!

Zoom in to easily operate small and hard to reach switches. After zooming in, scroll the display to show the area you want to operate.

Function features

In addition to touch operations, gesture operations are now available on the GOT in the same way as on tablet or mobile terminals.

Scroll

Object gesture

Specify an object to be enlarged, scrolled or flicked.

2-point press operation

To prevent accidental operations, press 2 points simultaneously and enable the touch operation.

Specification details and restrictions

● **Objects applicable to the object gesture function**   Historical data list display, alarm display (user), alarm display (system), simple alarm display, historical trend graph, document display, video/RGB display object*1

*1 Not supported by GT2705.

Recommended industries

Automotive	SEMICON, LCD	Electronics
F & B	Pharma	Plant

Supported GOT types

GT27*	GT25	GT23
GT21	GS21	SoftGOT

* Restrictions apply to some functions. For the details, refer to the function descriptions above.

Supported devices

PLC	Servo	Inverter
	Robot	CNC

Easy interaction with database

Support system design

■ MES interface function

Having problems?	GOT will solve your problems!

Having problems?

Office

DB registration? PC software?

Information linking personal computer

Database server

SQL statement

DB

Collect data

Ethernet

Worksite

GOT will solve your problems!

Office

MES database sever

Ethernet

SQL statement
· Production instruction requests
· Production results etc.

Resource data
· Logging data
· Alarm data
· Operation log data

Worksite

GOT transmits data collectively even to the equipment of other manufacturers

Non-Mitsubishi Electric programmable controller A

Mitsubishi Electric programmable controller

Temperature controller

How can I analyze the production site information and increase production efficiency? Does it take time to construct the system?

GOT communicates with the MES database server without a personal computer and programs and sends the data such as production instruction requests and production results. Storing the resource data such as alarm history and logging data to a database enhances traceability.

Function features

The GOT uses SQL statements[1] to transmit data from the connected industrial devices to a database server.[2]

[1] Communication actions can be selected from SELECT, Multi-SELECT, UPDATE, INSERT, or DELETE.
[2] A separate license (GT25-MESIFKEY) is required.

Easy communication without programming

Communication with databases is configured in GT Works3 without any programming.

Transferring data of various devices collectively

GOT transmits data collectively to an MES database server by collecting data from various devices of different types and manufacturers. Collecting data in the GOT makes it easy to transmit data to the database.

Unicode® support for tag data type

Unicode® character strings can be used as the data type of collected data (device data). Multiple languages including Chinese are supported and there is no need to worry about character codes.

Resource data send function

The resource data collected in the GOT buffering area or an SD memory card can be sent to a database. The alarm information of GOT can be stored and managed in the database.

e-F@ctory

<MES (Manufacturing Execution System)>
The manufacturing execution system (MES) is a system that controls and manages production processes at a worksite in order to optimize quality, productivity, delivery date, and cost.

Specification details and restrictions

● **Function list** · DB interface function (resource data send function / tag function / trigger buffering function / trigger monitoring function / SQL text transmission function / arithmetic processing function / program execution function / DB buffering function) · Diagnosis function · DB server function (ODBC connection function / connection setting function / log output function)
● **Usable databases** Please refer to the GOT2000 Series MES Interface Function Manual.

Recommended industries

Automotive	SEMICON, LCD	Electronics
F & B	Pharma	Plant

Supported GOT types

GT27	GT25	GT23
GT21	GS21	SoftGOT

Supported devices

PLC	Servo	Inverter
	Robot	CNC

4

GOT Solutions - Data Handling Features

Support management of on-site data

Support system operation

Upgraded

■ File manager function

| Having problems? | GOT will solve your problems! |

17:00

Alarm logs, logging data, hard copies, etc.

Back up

GOT back side

GOT front side

Copy alarm logs, logging and other data at the same time

Select copy destination

Select data to copy

How can I make backup of alarm and logging data? It's bothersome to back up data separately.

Folders and files are shown in a list on a graphical screen so that it is easy to copy them as needed.

Function features

Check the folders and files that are stored on the GOT's SD memory card or USB memory, and copy or delete them in the list.

Graphical list display

File types can be identified with icons at a glance.

Supporting network drive NEW

Since the GOT files can be directly copied or moved to the network drive, data can be backed up easily.

* Supported by GT27, GT25.
* For the details, please refer to page 86.

Various file operations

Copy, delete, move, rename, or create files and folders. Multiple selection of files and folders is also possible.
Files can be operated also in mobile screens using the GOT Mobile function NEW .

Checking available space in drives

Easily check available space in the drives. It is useful when saving cumulative data such as logging and hard copies.

Select data   Sort data

Available space is displayed

Manage files with simple operations

Recommended industries

| Automotive | SEMICON, LCD | Electronics |
| F & B | Pharma | |

Supported GOT types
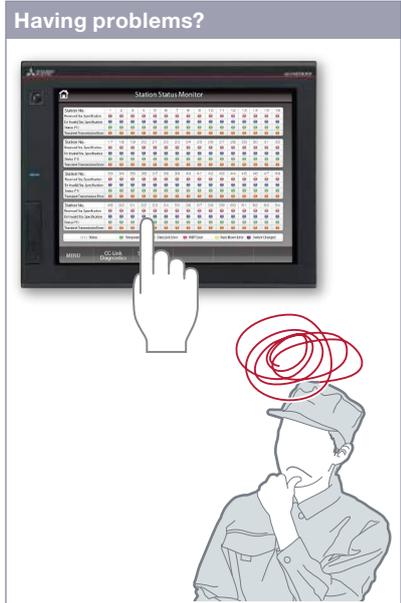
| GT27 | GT25 | GT23* |
| GT21 | GS21 | SoftGOT |

* Restrictions apply to some functions. For the details, refer to the function descriptions above.
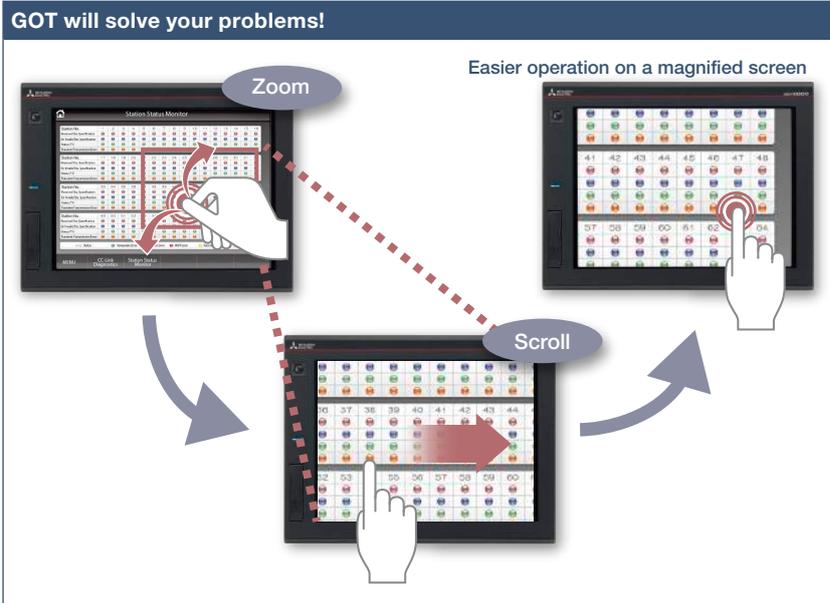
Supported devices

| PLC | Servo | Inverter |
| | Robot | CNC |

4

GOT Solutions - Data Handling Features

Send and retrieve files between GOT and PC

Upgraded

Support system operation

■ File transfer function

Having problems?

Office

Production results, alarm logs, etc.

Worksite

How can I check daily production results?

GOT will solve your problems!

Office

Send production results and alarm logs

Ethernet

Worksite

By using GOT, production results can be stored on the GOT's SD memory card or USB memory and sent to a personal computer or the USB memory on the front face of GOT. The GOT can also receive production instructions from the personal computer.

Function features

Files stored on the GOT's SD memory card or USB memory can be transferred easily. Network drive can be used as the transfer destination NEW .

FTP transfer

By using GOT, files stored on the GOT's SD memory card or USB memory can be sent to or received from an FTP server (personal computer). File transfer triggers (sampling, bit rise, etc.) can be used to set file transfer timing.

* Supported by GT2107-W, GT2104-R, and GT2103-PMBD among GT21 models.

GOT internal transfer

Files stored on the SD memory card or USB memory connected to the back side of GOT can be transferred to the USB memory on the front face of the GOT so that data can be obtained easily.

* Not supported by GT21 and GS21.

FTP transfer

FTP server (personal computer)

Office

Obtain production instructions

Send production results and alarm logs

Ethernet

Worksite

FTP client (GOT)

File server (personal computer)

GOT internal transfer

File server (personal computer)

Office

Send production results and alarm logs

Ethernet

GOT back side

Worksite

GOT front side

Transfer production results and alarm logs

File transfer using a network drive NEW

The GOT data stored in a file server (personal computer) connected by Ethernet can be transferred to an FTP server (personal computer), or the data can be directly transferred between the GOT and the file server (personal computer).

* Not supported by GT23, GT21, and GS21. For the details, see page 86.

* For the necessary option devices, please refer to the "Function list" (page 148)

Recommended industries

| Automotive | SEMICON, LCD | Electronics |
| F & B | Pharma | Plant |

Supported GOT types

| GT27 | GT25 | GT23* |
| GT21* | GS21* | SoftGOT |

* Excluding some models or restrictions apply to some functions. For the details, refer to the function descriptions above.

Supported devices

| PLC | Servo | Inverter |
| | Robot | CNC |

Various controllers and connection types

Support system design

■ Multi-channel function/Device data transfer function

Having problems?

MODBUS®

Ethernet

?

CC-Link IE

RS-232
RS-422

RS-485

How can I connect various industrial devices in various connection types?

GOT will solve your problems!

CH1
Mitsubishi Electric programmable controller

CH2
Non-Mitsubishi Electric programmable controller

CH3
Temperature controller

CH4
Servo amplifier

GOT supports various industrial devices and connection types. With the multi-channel function, four channels of industrial devices can be monitored on a single GOT.

Function features

GOT supports various industrial devices and connection types. With the multi-channel function and the device data transfer function, multiple types of industrial devices of different manufacturers can be monitored.
* Excluding GT2103-PMBLS

<Supported connection types>

Ethernet, RS-232, RS-422/485, CC-Link IE Controller Network, CC-Link IE Field Network, CC-Link, Bus, MELSECNET/H*, MODBUS®
* Including MELSECNET/10 mode.

Multi-channel function

Up to four channels* of industrial devices (programmable controller, servo, inverter, temperature controller, etc.) can be monitored with one GOT.
* Up to 2 channels on GT23, GT21, and GS21.

<Typical applications>

Programmable controllers of different manufacturers via Ethernet

Ethernet

HUB

Non-Mitsubishi Electric programmable controller A

Non-Mitsubishi Electric programmable controller B

Non-Mitsubishi Electric programmable controller C

Mitsubishi Electric programmable controller

Programmable controllers, temperature controllers, inverters

Ethernet

Temperature controller

Mitsubishi Electric programmable controller

Inverter

Device data transfer function

Using GT Works3, simply set source devices, destination devices, and triggers and you can transfer devices between industrial devices.

Temperature controller   Programmable controller

Transfer device data

Destination
Mitsubishi Electric programmable controller

Source
Temperature controller

Specification details and restrictions

● **Various peripherals**   External devices (operation panels, switches, lamps, etc.), two-dimensional code readers, barcode readers, RFID readers, IC card readers, speakers, video cameras, displays (RGB output), personal computers (RGB input), serial printers, PictBridge compatible printers
● **Multi-channel function**   Supported connection types, channel numbers, and functions vary depending on the GOT type. For the details, please refer to the relevant product manual or the "Connectable model list" (page 152).

Recommended industries

| Automotive | SEMICON, LCD | Electronics |
| F & B | Pharma | Plant |

Supported GOT types

| GT27 | GT25 | GT23* |
| GT21* | GS21* | SoftGOT |

* Excluding some models or restrictions apply to some functions. For the details, refer to the function descriptions above.

Supported devices

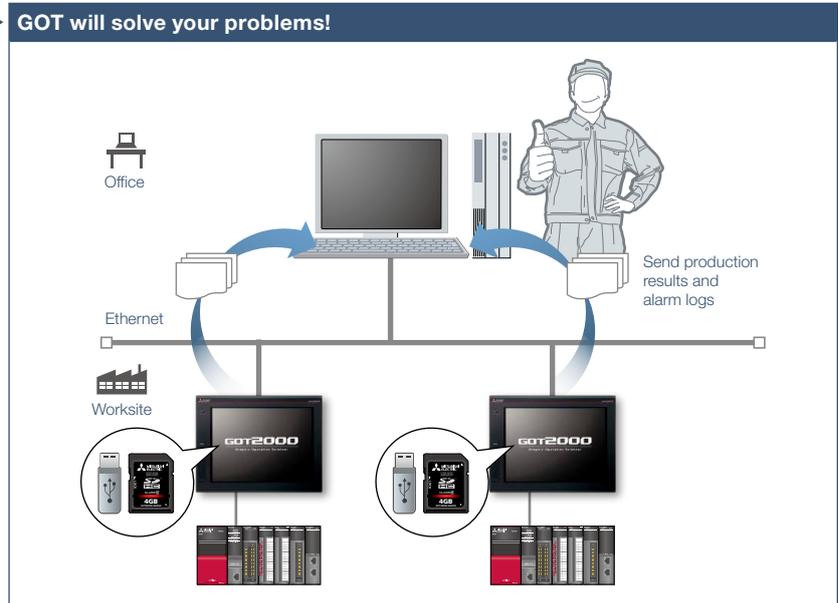| PLC | Servo | Inverter |
| | Robot | CNC |

Support CNC maintenance

■ Interaction function with CNCs

Having problems?

"NC alarm" occurred on a GOT!
How can I maintain the system quickly?

GOT will solve your problems!

Alarm screen
(CNC monitor 2)

Monitor screen
(CNC monitor 2)

Edit screen
(CNC monitor 2)

Input/Output screen
(CNC monitor 2)

Use a GOT to monitor or check alarms of a CNC. When an NC alarm occurs, there's no need to use a personal computer when modifying programs and you can quickly recover the system.

Function features

A GOT can be used to display various monitors and make settings of a CNC connected to the GOT.

* CNC monitor/CNC machining program edit/CNC data I/O functions are supported by GOTs with a resolution of SVGA or higher.
* Not supported by GT25 wide models.

CNC monitor 2 function (CNC C80)

The function enables monitoring and operation of the standard screens (monitor, setup, edit, diagnosis, and maintenance) of the C80 Series CNC connected to the GOT. You can also use this function to input/output data or edit machining program of the CNC C80.

CNC monitor function (CNC C70)

The function enables the alarm diagnosis, position display monitor, tool compensation/parameter setting, or program monitor of a CNC C70 connected to the GOT.

CNC machining program edit function (CNC C70)

Machining programs and MDI programs of a CNC C70 connected with the GOT can be edited.

CNC C70

Copy, compare, or delete CNC data

GOT2000

SD memory card
USB memory

CNC data I/O function (CNC C70)

Machining programs and parameters can be copied, compared, or deleted in a CNC C70 connected with the GOT.

Specification details and restrictions　　　　* For the necessary option devices, please refer to the "Function list" (page 148).

● **Target models**　CNC (C80, C70)
● **Supported connection types**　Ethernet connection (DISPLAY I/F connection only)*1, bus connection*2
*1 The CNC data I/O function cannot be used with CNC C70 when CC-Link IE Field Network Ethernet adapter module is used.
*2 Supported by CNC C70 only.
● **Target data**
CNC monitor 2 function　The target data is the same as that of the CNC monitor function, the CNC machining program edit function, and the CNC data I/O function.
CNC monitor function　Alarm diagnosis, position display, tool compensation/parameter setting, program
CNC machining program edit function　Machining program, MDI program
CNC data I/O function　Machining program, parameter, tool offset data, workpiece offset data, common variable, maintenance data, cycle monitor data

Recommended industries

Automotive　Electronics

Supported GOT types

GT27*　GT25*　GT23
GT21　GS21　SoftGOT

* Excluding some models. For the details, refer to the function descriptions above.

Supported devices

PLC　Servo　Inverter
　　Robot　CNC

Support iQSS-compatible devices

■ iQSS utility function

Having problems?	GOT will solve your problems!

GOT2000

Check if AnywireASLINK sensors are disconnected and quickly take corrective actions as needed.

iQSS-compatible devices such as AnyWireASLINK

Connect an SD memory card or USB memory that stores the iQSS-compatible device information to the GOT

iQSS-compatible devices such as AnyWireASLINK

How can I check the status of AnyWireASLINK without a personal computer?

Check the status of iQSS-compatible devices such as AnyWireASLINK and the parameter information on the GOT without a personal computer.

Function features

Just enable the iQSS utility function to automatically generate monitoring screens. There is no need to create monitoring screens for every sensor and thus you can reduce time for startup, operation, and maintenance of the sensor system.

For the details, please refer to the iQ Sensor Solution catalog (L(NA)16029ENG).

Monitoring information screen

The status, sensing level, I/O status of the device being monitored can be checked in this screen.

Parameter information screen

The list of parameters and the details of the device being monitored can be displayed. Parameters can be changed in this screen.

Specification details and restrictions   * For the necessary option devices, please refer to the "Function list" (page 148).

● **Target models**   RCPU, QCPU (Q mode), LCPU
● **Supported connection types*1**   Ethernet connection*2, direct CPU connection*3, serial communication connection, CC-Link IE Controller Network connection*5, CC-Link IE Field Network connection*4, CC-Link connection, bus connection*5, MELSECNET connection*5
*1 For the details of connectable models of each connection type, please refer to the "Connectable model list" (page 152).
*2 L02SCPU or L02SCPU-P cannot be used.
*3 When connecting the GOT with the LCPU, use L6ADP-R2.
*4 Cannot be used to connect a Q00JCPU, Q00CPU, Q01CPU, Q02CPU, Q02HCPU, Q06HCPU, Q12HCPU or Q25HCPU.
*5 RCPU and LCPU are not supported.

Recommended industries			Supported GOT types			Supported devices		
Automotive	SEMICON, LCD	Electronics	GT27	GT25	GT23	PLC	Servo	Inverter
F & B	Pharma	Plant	GT21	GS21	SoftGOT		Robot	CNC

Easy IoT application to the equipment

NEW

Support maintenance work

Support system startup/adjustment

Support system operation

■ e-F@ctory Starter Package (free of charge sample project)

Having problems?

How can I use the collected data?

What should we do to add IoT functions?

To add IoT functions to the shop floor, what do we have to do in the first place?

GOT will solve your problems!

Sample project

MELSEC iQ-R series

GOT2000
Graphic Operation Terminal

Clear graphic display of analysis results

Simple analysis from collected equipment information

GT SoftGOT 2000

Remote monitoring with GT SoftGOT2000

By adding a programmable controller (MELSEC iQ-R Series) and GOT to the existing equipment, IoT function systems can be easily developed.

Function features

e-F@ctory Starter Package is a sample project for the MELSEC iQ-R Series programmable controllers and GOT2000 that realizes "visualization" and "simple analysis" on the shop floor.
It is possible to add IoT functions to the equipment just by making basic settings such as device assignment and parameter setting.

e-F@ctory

For the details, please refer to the e-F@ctory Starter Package leaflet (E001ENG).

Low-cost installation

Installation cost can be reduced because it is not necessary to create sequence program and screen data from scratch.
A large lineup of functions that focus on management, maintenance, and improvement of equipment are available.

Management function screen

Improvement function screen

* Screen images are subject to change without notice.

Specification details and restrictions

● **Target models**   MELSEC iQ-R Series, MELSEC iQ-F Series[*1], GOT2000 Series, GT SoftGOT2000   *1 Some functions are not supported.
● **Lineup of project data**   MELSEC iQ-R Series project data, GOT2000 Series SVGA (800 × 600) project data (By changing the GOT type, data can be used for other models.)
● **Lineup of provided functions**   Equipment operation monitoring solution (dashboard, production counting, process capability index (histogram), operational status monitor, cylinder & cycle time measurement monitor, error sign inspection, error stop action, equipment trouble Pareto chart, control chart (Xbar-R), loss time analysis, intensity management)

Recommended industries

Automotive	SEMICON, LCD	Electronics
F & B	Pharma	Plant

Supported GOT types

GT27	GT25	GT23
GT21	GS21	SoftGOT

Supported devices

PLC	Servo	Inverter
	Robot	CNC

4

GOT Solutions - Interactive Features with Other Industrial Devices

Support screen design

Support system design

■ Standard screen samples

| Having problems? | GOT will solve your problems! |

It's bothersome to design setting screens from scratch...

Now we have HMIs but it's hard to design screens from scratch.

Trend graph display (7 patterns)

Displays the data collected with the logging function in a trend graph

Counter display (4 patterns)

Monitors or resets counters for the data such as production volume and tool use

Standard screens are grouped into 17 categories by purpose.
Frequently used screens are available as sample screens.

Parameter setting (3 patterns)

Displays set items and enables input of set values for various parameters

Manual operation (6 patterns)

Executes ON/OFF operations of signals (bit devices)

Alarm history (2 patterns)

Displays alarms in the history format and enables checking of the details and recovery methods of a selected alarm

■ Function samples

These are sample screens that you can feel GOT2000 recommended functions.

Recipe

Provides samples to use the recipe function easily

Screen bookmark

Provides the list to bookmark screens. You can register frequently-used screens and switch between the screens in the list.

CC-Link network monitor

Displays the CC-Link network status (host station, other stations, errors, etc.)

Specification details and restrictions

● **Other standard screen samples** I/O signal display, numerical data display, start-up condition display, operation ready signal display, interlock display, interlock setting, machine selection setting, alarm frequency display, alarm status display, current alarm display, home position return, cycle time display

● **Other function samples** GOT Mobile function (Andon, remote controller), alarm function (level, sort), alarm function (hierarchy), device monitor function, Kana-Kanji conversion function, AnyWireASLINK network monitor function, how to comply with FDA 21 CFR Part 11, PDF search external control function, etc.

● **How to obtain sample screens** Sample screens are included in GT Works3. For the details, please contact your local sales office.

● **Supported language** English, Japanese, Chinese (Simplified)

Support connection with industrial devices

Support system design

■ Connection samples

The lineup of samples for non-Mitsubishi industrial devices has been expanded! These are sample screens for monitoring current values of connected devices, setting parameters, etc.

Mitsubishi Electric programmable controller
· MELSEC iQ-R Series   R08CPU
· MELSEC iQ-F Series   FX5U-32MCPU
· MELSEC-L Series   L06CPU
· MELSEC-Q Series   Q06UDEHCPU
· MELSEC-F Series   FX3U-16MCPU

Mitsubishi Electric servo amplifier   GOT *Drive*
· MELSERVO-J4 Series   MR-J4-A(-RJ)
· MELSERVO-J4 Series   MR-J4-B(-RJ)
· MELSERVO-J4 Series   MR-J4W2-B
· MELSERVO-J4 Series   MR-J4W3-B
· MELSERVO-J3 Series   MR-J3-A
· MELSERVO-JE Series   MR-JE-B

Mitsubishi Electric inverter   GOT *Drive*
· FREQROL-A800 Series   FR-A820-15K
                  FR-A820-0.4K-E1
                  FR-A820-0.4K-GF
· FREQROL-F800 Series   FR-F820-15K
                  FR-F820-0.75K-E1
· FREQROL-F700P Series   FR-F720P-0.75K
· FREQROL-E700 Series   FR-E710W-0.1K
· FREQROL-D700 Series   FR-D710W-0.1K

Mitsubishi Electric temperature controller
· MELSEC-Q Series   Q64TCTTN
· MELSEC-L Series   L60TCTT

Mitsubishi Electric other devices
· Motion controller
· Simple Motion module
· Industrial robot   GOT *Drive*
· Energy measuring unit EcoMonitorLight/
  Electric multi-measuring instrument
  etc.

Non-Mitsubishi Electric industrial devices
· Robot controller
· Stepping motor
· Network signal tower
· Temperature controller
  etc.

■ iQSS related samples

These are sample screens to connect to iQSS-compatible devices.

AnyWireASLINK network monitor function

iQSS backup/restoration
(PLC↔sensor) function

■ Using sample screens

In the GT Works3 menu, select [Screen] → [New] → [Utilize Data].

Select "Sample Project" as the Target on the Utilize Data screen

↓

Select or input (arbitrary) a keyword

↓

Select from the search results, and press the Utilize button

↓

In the sample screen manual, check the details of settings and functions

FA Integrated Engineering Software
MELSOFT iQ Works

MELSOFT iQ Works is an integrated software suite consisting of GX Works3, MT Works2, GT Works3, RT ToolBox3*1 and FR Configurator2, which are programming software for each respective product. Integration is further enhanced with MELSOFT Navigator as the central system configuration incorporating an easy-to-use, graphical user interface with additional project-sharing features such as system labels and parameters. The advantages of this powerful integrated software suite are that system design is made much easier with a substantial reduction in repetitious tasks, cutting down on errors while helping to reduce the overall TCO.

FA Integrated Engineering Software
MELSOFT iQ Works

System management software
MELSOFT **Navigator**

System level graphic-based configuration tool that simplifies the system design by providing a visual representation of the system. System management features such as system-wide parameterization, labels and block reading of project data are also included.

Programmable controller engineering software
MELSOFT **GX Works3**

GX Works3 is the latest generation of programming and maintenance software offered by Mitsubishi Electric specifically designed for the MELSEC iQ-R Series control system. It includes many new features such as graphic-based system configuration, integrated motion control setup, multiple language support, providing an intuitive engineering environment solution.

HMI/GOT screen design software
MELSOFT **GT Works3**

This integrated software is used to create professional screen designs for GOTs. Developed with the concepts of simplicity, sleekness, and user-friendliness in mind, this is a powerful tool that pushes boundaries and delivers endless design possibilities.

Motion controller engineering software
MELSOFT **MT Works2**

This motion control design and maintenance software includes intuitive graphic-based programming together with a digital oscilloscope simulator.

■ **Robot engineering software**
   MELSOFT **RT ToolBox3*1**

■ **Inverter setup software**
   MELSOFT **FR Configurator2**

■ **C Controller setting and monitoring tool**
   MELSOFT **CW Configurator**

■ **Servo setup software**
   MELSOFT **MR Configurator2**

*1 RT ToolBox3 mini (simplified version) will be installed if iQ Works product ID is used. When RT ToolBox3 (with simulation function) is required, please purchase RT ToolBox3.

MELSOFT Navigator

■ MELSOFT Navigator enables interaction with iQ Works

Share labels among projects
Labels can be shared among GX Works3, MT Works2, and GT Works3 so that if the device assignment is changed in one project, the changes are automatically applied to other projects.

No need to set parameters for each tool*²
The information set in the system configuration diagram can be applied in a batch to each program in GX Works3, GX Works2, MT Works2, and GT Works3. There is no more need to start up each software and check the consistency.
*2 Detailed parameters must be set with each tool.

*1 RT ToolBox3 mini (simplified version) will be installed if iQ Works product ID is used. When RT ToolBox3 (with simulation function) is required, please purchase RT ToolBox3.

Programmable Controller Engineering Software MELSOFT GX Works3

Programmable Controller Engineering Software MELSOFT GX Works2

Motion Controller Engineering Software MELSOFT MT Works2

HMI/GOT Screen Design Software MELSOFT GT Works3

Robot Engineering Software MELSOFT RT ToolBox3*¹

Inverter Setup Software MELSOFT FR Configurator2

C Controller Setting and Monitoring Tool MELSOFT CW Configurator

Servo Setup Software MELSOFT MR Configurator2

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MELSOFT iQ Works

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HMI/GOT Screen Design Software
MELSOFT GT Works3
Easily create professional screens!

Easily manage project data

Work tree

Easily create stylish screens

GOT Graphic Ver.2 NEW　P.108

Easily check the settings

Data browser　　　　　P.111

Quickly search devices and labels

Device search NEW　　　P.112

Screen design tips movie (Japanese) ▶

6

MELSOFT GT Works3

Easily create stylish screens
Library

Create stylish, clear meters
Graphical meter   P.115

Easily create tables
Table

Quickly display screen thumbnails
Screen image list `Upgraded` **P.111**

Search by keywords and effectively use data
Utilize data (Screens) `Upgraded`   **P.106**

Reduce screen creation time

■ Utilize data (Screens)

Individual screens can be utilized from past projects and sample projects. Select screens to utilize, then drag and drop to launch the utilization wizard. Just by following simple step, screen data can easily be utilized.

Easy searches from category lists

Drag & Drop

Utilization wizard

Simple step navigation

1. Target screen setting
   The screen number is displayed in red if it is used in the project being edited.

2. Editing related settings
   Comment groups and scripts related to the target screen can also be utilized at the same time.

3. Controller setting
   Target screen controller settings can be assigned to an empty channel in the currently editing project.

4. Unit No./Axis No. setting
   When utilizing screens whose system configuration is different, you can easily change the unit No. and the axis No. of the target screen.

5. Checking setting contents

Procedure: [Screen] → [Utilize Data]
Shortcut key: Ctrl + Shift + F

■ Utilize data (Projects)

When creating a new project, search through the existing projects to find any existing projects that may be reused. Keyword search helps narrow down the search.

Specify search range

Select "Sample Project" to reuse a sample project.

Select or input a keyword

Select a prepared keyword or input an arbitrary keyword.

Search results are displayed

Choose the applicable project from the search result

Procedure: [Project] → [Utilize Data]

Upgraded

■ Automatic scaling when changing GOT type

More objects are automatically scaled when changing to GOT types with different resolutions. It is now easier than ever to utilize screens of different resolutions, making the work process more efficient.

Target objects: Alarm display, simple alarm display, system alarm display, historical data list display, data list display, recipe display (record list)

When changing the GOT type resolution from VGA to SVGA

Increased usability

Previously

NEW

Before change (VGA)

The alarm display and historical data list display are also automatically enlarged. No need for size adjustments!

After change (SVGA)

After change (SVGA)

Procedure: [Common] → [GOT Type Setting] → [Perform Automatic Scaling on the positions/sizes of figures and objects] → [Option]

NEW

■ Script parts

Make scripts into objects and use them as script parts. The following operations are available, improving operability.
- Copying and pasting to another screen, grouping, registering to the library, adding to a template

6

MELSOFT GT Works3

Support screen creation

NEW

■ GOT Graphic Ver.2

Screen design

Screen design can be selected from various designs by theme. Simply select your favorite design from presets to change all screen backgrounds at once. You can keep screen design consistent across the entire project and reduce steps in the process. In addition, the screen design can be customized to create favorite design.

Pre-installed screen designs

Select one of the screen designs pre-installed in GT Designer3. You can easily set a screen design without paying attention to the setting items. Each screen can be customized individually.

Change the design for all screens at once ——

Customized screen designs

Customize a screen design. You can customize the background color, design of window screens, and other settings of a screen design selected from the pre-installed screen designs.

Contour shapes of window screens

Both square and rounded contours are available for window screens. The radius can be adjusted for rounded contours.

Square

6-dot radius

35-dot radius

Set your desired radius in one dot increments

Transparent window screen and alarm popup display

The background color transparency can be changed in window screens. You can check and control the window screen while viewing the overall image of the base screen. Alarm popups turn transparent as well so that they do not block the base screen underneath.

Configure the transparency of the window screen

Transparent alarm popup display

Alarm popup

Stylish system key window

Multiple system key windows are available for your screen design. Select a preset that fits your screen design to use a matching numeric keypad. The key window is made transparent when moved so that you can check the screen underneath.
* Not supported by GT21 and GS21.

Figure antialiasing

Antialiasing is available for figure contours in addition to on-screen text. Overall screen display is smoother for stress-free, stylish screen design.

Antialiasing enabled

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MELSOFT GT Works3

Procedure: [Common] → [GOT Type Setting] → Graphics Setting [GOT Graphic Ver.2]

Support screen creation

Upgraded

■ Label/Global label

Label

Instead of using devices, use label names to create easy-to-understand project data efficiently. Not only Mitsubishi Electric programmable controller devices, but also non-Mitsubishi Electric controller devices and GOT internal devices can be assigned to labels. Labels can be used in GT Works3. In addition, labels can be imported from GX Works3, GX Works2, and MT Developer2.

❶ Set label names and assign devices

❷ Select a label name when setting objects (Direct input is also possible.)

Select a type

Procedure: [Common] → [Label] → [New Label Group]

Global label

Global labels are used for connection to RCPUs or motion CPUs (MELSEC iQ-R Series) only. By using global labels, you can create the project data without paying attention to the actual devices. To use global labels of GX Works3 and MT Developer2, import them to GT Designer3.
Global labels for RCPUs (GX Works3) are useful since they can be imported from the project data at a time.
Global labels for motion CPUs (MT Developer2) are imported from CSV files.
* Not supported by GT21 and GS21.

NEW
In addition to CSV files, GX Works3 project data can be specified to import global labels.

NEW
Global labels and structure data can be checked with preview before importing.

Procedure: [Project] → [Import Other Data] → [Global Label]

Notifying change of global labels NEW
Check if there is a change in the GX Works3 project or CSV file specified when global labels are imported with the following methods.

• Notification icon in the status bar

• [Select Global Label] dialog, [Global Label Reference] dialog

■ Data browser

The data browser shows a list of objects used in the project. The settings can be edited directly on the browser or by opening the setting dialog. You can easily identify any duplicate data and no longer have to open multiple screens.

Directly edit on the list, or edit from the setting dialog.

Double-click

After selecting a line, the tree can be expanded with Shift + [+] key.

● **Display targets**
  Figures, objects, screen scripts, screen trigger actions

● **Editable details**
  Directly edit devices and text, etc.
  Change devices, text, colors, and figures in a batch
  Change action settings, fonts, and figures
  Change range settings of numerical displays and other objects
  Copy/paste multiple cells
  Sort and narrow down items by using devices/keywords
  Interchange columns with drag & drop

Procedure: [View] → [Docking Window] → [Data Browser]
Shortcut key: Ctrl + E

Upgraded

■ Screen image list (thumbnail display)

Created screens can be displayed and checked in the screen image list window as thumbnails. By viewing the screen image list, it is easy to look for the screen you need. It is convenient to copy or delete screens on the window.

Greatly improved speed to display screen images NEW

* Settings are required to speed up the display. For the details, please refer to the relevant product manual.

Double-click a screen on the window and display it on the screen editor

Copy or delete the screen on the window

Procedure: [Display] → [Docking Window] → [Screen Image List]

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MELSOFT GT Works3

Support screen creation

Upgraded

■ Alarm display (user/system)

The alarm display lists the collected user alarms or system alarms*1. When placing an alarm display, operation switches are arranged at the same time. There is no need to select operation switches for the alarm display separately, thus reducing time for screen design.

*1 GT21 and GS21 do not support the system alarm function.

GT27/GT25/GT23/GT2107-W/
GT2104-R/GS21   GT2103-P

Operation switches are arranged at the same time

Procedure: [Object] → [Alarm Display] → [Alarm Display (User)/Alarm Display (System)]

NEW

■ Device search

Search the current project for devices, labels, or tags. By quickly checking the device use status, you can identify which functions use the found devices, and change the related settings. Keyword search narrows down the search results.

Search by device

Set details of search conditions

Double-click to jump to the device setting
(jump to Common Settings is also possible)

Quickly display the search results.
Search without worrying about device type and data length.

Search all devices when the [Device] field is empty

Search by keyword is also available

Procedure: [Search/Replace] → [Device Search]
Shortcut key: Ctrl + F

NEW

■ Reflecting [Comment Group No.], [Comment No.], [Part No.] to objects

When changing comment group No., comment No., or part No., the number being set to objects are changed accordingly.
In the [Option] dialog, select whether or not to reflect the change to the object settings when changing the numbers.

Changing comment No.

Display the confirmation message whether to reflect the change.
(Settings are made in the [Option] dialog)

Reflect the change to the object where the comment is used.

■ Template

Customize each template to the desired look-and-feel, ranging from color options to device selection. Attributes such as devices and colors can be set for each template.
You can easily change devices and colors by associating each object with the template's attribute.

Make batch changes with simple settings

Change color from green to red

Colors and devices are changed in a batch

Template attributes (color)

- Historical trend graph line color
- Text color
- Numerical display value color
  - ⋮

● Items that can be registered in templates
   Figures, Objects

● Attributes that can be registered and changed in templates
   Device (Bit, Word), Numerical value, Text, Color, Figure, Font, Text size

・Selecting from library
  Procedure: [View] → [Docking Window] → [Library List (Template)]
  Shortcut key: Alt + F9

・Creating template
  Procedure: Select object → Right-click → [Template Registration] → [Register to Template]

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MELSOFT GT Works3

Support screen creation

■ e-Manual

e-Manual is the Mitsubishi Electric FA Electrical Document Manual with a dedicated viewer (e-Manual Viewer). Useful functions are included such as keyword search of multiple manuals, saving your favorites, saving memos, and others.

Specifications?   How to make settings?

❶ Install e-Manual Viewer

❷ Always download the latest manuals. Easy to update with just one click!

❸ Increase your screen design efficiently

Quickly confirm with F1 key
Press the F1 key in GT Works3 and jump to e-Manual for the dialog being edited! Quickly check setting methods and other information!

GT Works3

F1

e-Manual

Easy to view, easy to use!
Easy to view contents, easy to use, useful functions help you access manuals efficiently. Quickly search for the information you need.

e-Manual Viewer - GT Designer3
Cross Manual Search   GT Designer3

Cross Manual Search	Bookmark	Note
Search required information from multiple manuals by keyword. You can get to the information you need without opening manuals one by one.	Bookmark frequently used manuals and pages and you can check the information quickly.	Take a memo, such as know-how, and add it to the manual and you can customize manuals as you like.

Procedure: [Help] → [GT Designer3 Help]
Shortcut key: F1

* For the details, please contact your local sales office.

Specification details and restrictions

<GOT manuals available in e-Manual>
● **Manual name**   GOT2000 Series User's Manual (Hardware), GOT2000 Series User's Manual (Utility), GOT2000 Series User's Manual (Monitor), GT Designer3 (GOT2000) Screen Design Manual

<e-Manual Viewer Windows® version>
● **Supported OS**   Microsoft® Windows® 10, Microsoft® Windows® 8.1, Microsoft® Windows® 8, Microsoft® Windows® 7, Microsoft® Windows Vista®, Microsoft® Windows® XP
● **How to obtain e-Manual**   e-Manual is included in GT Works3 Ver.1.155M or later. For the details, please contact your local sales office.

<e-Manual Viewer tablet version>
● **Supported OS**   Android™ 4.3/4.4/5.0, iOS 8.1 or later
● **How to obtain e-Manual**   e-Manual is available for download from application distribution sites. (Search by "Mitsubishi Electric e-manual")

Tablet version (Android™)
* Japanese site

Tablet version (iOS)
* Japanese site

Easily create stylish screens

■ Align

Selected figures and objects are aligned to the anchored figure or object according to the specified alignment type.

Anchored figure

Select left-align

❶ Select multiple figures and objects

❷ Click (or double click) a figure or an object to use as an anchor

❸ Select alignment direction from the Align toolbar

❹ Alignment completed!

■ Graphical meter

Just select a meter from the preset list and you can create stylish, clear meters. The position and angle of scales can be adjusted by mouse operation and the shape and design can be changed easily. Warning color display indicates the machine status clearly.

Select from the toolbar

Select meter shape

Select from the preset list

The list includes various choices

Easy to adjust settings by mouse operation

Adjust scale position

Adjust warning color display position

Adjust start/end angle of the meter

Procedure: [Object] → [Graphical Meter]

Upgraded

■ Logo text

The background of the logo text can be made transparent.

Previously

GOT2000

NEW

GOT2000

Uncheck the [Background Color] checkbox to make the background of the text transparent.

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MELSOFT GT Works3

Support debugging

■ Simulator

Since the operation of the project data can be confirmed on the personal computer, the program can be efficiently debugged while making changes on the screen. Even if hardware is not available, the operations can be confirmed with a personal computer and sequence programs. The screen images can be printed and saved, and easily used when creating specifications and operation manuals.

* GX Works3, GX Works2, GX Simulator, or MT Works2 is required separately. (It varies depending on the CPU to simulate.)

Start simulator

Just click "Update" after modifying the screen!

Click with mouse to simulate touch operation

Change the device value or ON/OFF state

GT Works3 simulator

GX Works3 simulator

Execute designated program

Communication/monitor

Procedure: [Tools] → [Simulator] → [Activate]
Shortcut key: Ctrl + F10

■ Data verification

Verify the project data and check the results for each screen/object.
From the Verify Result window, you can jump to the target object or can narrow down results by items such as the screen type. This function enables you to check differences and modify the data quickly even if the project data includes many screens.

❶ Verify Project (verifying the project being edited against one in a personal computer) and GOT Verification (verifying the project being edited against one in the GOT) are available.

❷ Export of verified results and refinement by items such as screen type are possible.

❸ Double-click on an error or warning line to jump to the corresponding object.

❹ The background color of a row varies according to the type of a difference.
Pink: The item exists in both projects and the data are not matched
Blue: The item exists only in the source project
Green: The item exists only in the destination project

· **Project verification**
  Procedure: [Project] → [Verify Data]
· **Verification with GOT**
  Procedure: [Communication] → [Verify GOT] * In the Verify Result dialog, select [Output to Verify Result (window)] to display the above Verify Result window.

■ Data check list

The touch switch quantity and overlapping state, object quantity and illegal devices are checked and the results are displayed as a list. Double-click on an error or warning line to jump to the corresponding object. Quickly identify errors and warning objects.

Double-click!

Jump to error object

Procedure: [View] → [Docking Window] → [Data Check List]

Support startup work

Upgraded

■ Data transfer (batch write to multiple GOTs)

Single package data (project data, communication drivers, etc.) can be installed on multiple GOTs connected via Ethernet at once. (Maximum 256 GOTs)
Batch installation on multiple GOTs reduces data transfer time and prevents data update omission. When multiple GOTs share the same project data on a large equipment, this feature reduces screen correction and update tasks.

* Supported by GT2107-W, GT2104-R, and GT2103-PMBD among GT21 models.

Ethernet

Batch installation on multiple GOTs

Set whether to write the following settings.
- Screen Switching/Window, System Information, Station No. Switching
- [Connected Ethernet Controller Setting] in the [Controller Setting] (each channel)

If [Not write] is selected, settings in each target GOT remain unchanged.

The GOT identification information including the GOT IP address are automatically acquired, and the target to perform batch installation can be selected.

Procedure: [Communication] → [Batch Write to multiple GOTs]

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Support globalization

■ Speech synthesis function

Just enter arbitrary text in GT Works3 to create a sound file. It is easy to create a sound file of a message that is needed to output sound on GOT. The speaker (female/male), language, speed, pitch, and volume of the voice can be set. Messages can be created in 6 languages and you can create the sound notification system in multiple languages.

* To register or update messages, GT Works Text to Speech License (SW1DND-GTVO-M) is required.

Supported language

Male	Japanese	English	Chinese (Simplified)		Korean	Spanish

Female	Japanese	English	Chinese (Simplified)	Chinese (Traditional)	Korean	Spanish

Image of creating a sound file (message)

Select language and speaker (male/female)

Playback and check the sound

Enter an arbitrary message

An error occurred.

系统发生异常。

Procedure: [Common] → [Sound] → [Sound File List]

■ Language switching

Create comments of different languages, save them in separate columns, and you can switch languages easily just by switching column numbers. In addition, the character strings of switches and lamps can easily be converted from the Text or Text Figures into Comments. This makes it easy to upgrade screens to display multiple languages.

Comment group

Register text to comment group!

Add comments for language switching!

Text

Text figure

English Japanese Chinese Arabian

Various languages are supported because Windows fonts can be used for comment groups.

Comment group for easy language switching!

Procedure: [Common] → [GOT Environmental Setting] → [Language Switching]

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MELSOFT GT Works3

■ FA Term Translation Tool

This is the software to translate comments (words, sentences) that are used in MELSOFT applications including GT Works3. The software uses the FA Term Translation Dictionary provided by Mitsubishi Electric. You can use the software even when your computer is not connected to the Internet. In addition, it is possible to create your own dictionary and switch dictionaries depending on your needs. The software supports creation of multiple language screens.

FA Term Translation Tool

❶ Copy comments to translate (e.g. from GT Works3) and paste them to the FA Term Translation Tool window

❷ Translated results are displayed

❸ Check a checkbox to save it to the dictionary

GT Works3

❹ Copy the comments translated with FA Term Translation Tool and paste them to where you want to use them (e.g. GT Works3).

❺ It is easy to create language switching screens.

·**Starting FA Term Translation Tool**
  Procedure: Windows menu → [MELSOFT] → [FATranslator] → [FA Term Translation Tool]

Specification details and restrictions

● Compatible language

• Japanese → English, Chinese (Simplified), Chinese (Traditional)

• English → Japanese

• Chinese (Simplified) → Japanese

• Chinese (Traditional) → Japanese

● Supported OS (Japanese version, English version)

• Microsoft® Windows® 10

• Microsoft® Windows® 8.1

• Microsoft® Windows® 8

• Microsoft® Windows® 7

● About this tool

Translation by FA Term Translation Tool is a mechanical translation. Use this tool as a tool to support translation.

● How to obtain this tool

This tool is included in the MITSUBISHI ELECTRIC FA Library DVD-ROM of GT Works3 Version 1.130L or later.

For the details, please contact your local sales office.

e-F@ctory solves customers' issues and concerns by enabling visualization and analysis that lead to improvements and increase availability at production sites.

e-F@ctory is the Mitsubishi Electric solution for improving the performance of any manufacturing enterprise by enhancing productivity, and reducing the maintenance and operations costs together with seamless information flow throughout the plant. e-F@ctory helps to reduce the overall TCO* and is achieved in the following four areas:

* TCO: Total Cost of Ownership

Reduce energy costs

Energy saving solution

Modern manufacturing depends much on reducing energy costs as a way to realize an efficient manufacturing enterprise. e-F@ctory supports this by allowing visualization of real-time energy usage, helping to reduce the overall energy consumption.

Integrate FA and IT systems at low cost

Edge-computing (FA-IT information connection)

e-F@ctory solutions provide direct connectivity from the shop floor to enterprise, such as Manufacturing Execution System (MES) without requiring a gateway computer. This enables leaner operations, improved yield, and efficient management of the supply chain.

Reduce development, production, and maintenance costs

iQ Platform

The iQ Platform minimizes costs at all phases of the automation life cycle by improving development times, enhancing productivity, reducing maintenance costs, and making information more easily accessible. Integration is at the heart of the iQ Platform, with a highly intelligent controller platform as the core, combined with a seamless communication network and an integrated engineering environment.

iQ Platform

Reduce setup and maintenance costs

iQ Sensor Solution

Easily setup and maintain various types of sensors. Maintenance and design costs can be reduced as compatible iQSS partner sensors can be managed together.

iQSS

FA integrated solutions reduce total cost

> Overall production information is captured in addition to energy information, enabling the realization of efficient production and energy use (energy savings).

Best-in-class solutions across the ecosystem

e-F@ctory Alliance

The e-F@ctory Alliance is an ecosystem offering best-in-class solutions by combining products between Mitsubishi Electric and its various partners. Close collaboration with such partners broaden the choices for the customer and realize the best solution possible.

Related materials Various catalogs and leaflets are available.

■ Extensive lineup and solutions for various applications

GOT2000 Series Wide Model
L(NA)08461ENG

GOT2000 Series White & Open
L(NA)08414ENG

GOT2000 Series Rugged Model
L(NA)08555ENG

GOT2000 Series Handy GOT
L(NA)08506ENG

GT SoftGOT2000 Solutions
L(NA)08606ENG

Monitoring Control System Solutions
L(NA)08577ENG

GOT2000 Series GOT Mobile Function
Application Examples
L(NA)08464ENG

FA Application Package
iQ Monozukuri Process Remote
Monitoring
L(NA)08674ENG

■ GOT SIMPLE Series catalogs

GOT SIMPLE Series*
L(NA)08649ENG (D700 Version)
L(NA)08676ENG (CS80 Version)

Simple Solution Catalog*
L(NA)08602ENG (D700 Version)
L(NA)08355ENG (CS80 Version)

■ GOT2000 First Guide

GOT2000 Series Quick Start Guide
L(NA)08311ENG

GOT Mobile Function
Quick Start Guide
L(NA)08385ENG

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* The inverter model in the catalog differs depending on the catalog number.

Specifications, Product List, Support INDEX

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Specifications

Specifications

GT27 model

General specifications

Item	Specifications				
Operating ambient temperature [*1]	0 °C to 55 °C [*2]				
Storage ambient temperature	−20 °C to 60 °C				
Operating ambient humidity	10% RH to 90% RH, non-condensing				
Storage ambient humidity	10% RH to 90% RH, non-condensing				
Vibration resistance	Compliant with JIS B 3502 and IEC 61131-2		Frequency	Acceleration	Half amplitude	Sweep count
		Under intermittent vibration	5 to 8.4 Hz	—	3.5 mm	10 times in each X, Y, or Z direction
			8.4 to 150 Hz	9.8 m/s²	—	
		Under continuous vibration	5 to 8.4 Hz	—	1.75 mm	—
			8.4 to 150 Hz	4.9 m/s²	—	
Shock resistance	Compliant with JIS B 3502 and IEC 61131-2 (147 m/s² (15G), 3 times in each X, Y, or Z direction)				
Operating atmosphere [*6]	No greasy fumes, corrosive gas, flammable gas, excessive conductive dust, and direct sunlight (as well as at storage)				
Operating altitude [*3]	2000 m or less				
Installation location	Inside control panel				
Overvoltage category [*4]	II or less				
Pollution degree [*5]	2 or less				
Cooling method	Self-cooling				
Grounding	Grounding with a ground resistance of 100 Ω or less by using a ground cable that has a cross-sectional area of 2 mm² or more. If impossible, connect the ground cable to the control panel.				

Operate and store the GOT in environments without direct sunlight, high temperature, dust, humidity, and vibrations.

For the status of conforming to various standards and laws (CE, ATEX, UL/cUL, Class I Division 2, EAC, KC, KCs, and maritime certifications [ABS/BV/DNV GL/LR/NK/RINA]), please refer to the Mitsubishi Electric Factory Automation Global website (**www.MitsubishiElectric.com/fa/**).

*1 Includes the temperature inside the enclosure of the control panel to which the GOT is installed.

*2 When any of the following units or option is mounted, the maximum operating ambient temperature must be 5 °C lower than the one described in the general specifications: multimedia unit (GT27-MMR-Z), MELSECNET/H communication unit (GT15-J71LP23-25, GT15-J71BR13), CC-Link communication unit (GT15-J61BT13), protective cover for oil.

*3 Do not use or store the GOT under a pressure higher than the atmospheric pressure at altitude 0 m. Doing so may cause a malfunction. Air purging by applying pressure to the control panel may create clearance between the surface sheet and the touch panel. This may cause the touch panel to be not sensitive enough or the sheet to come off.

*4 This indicates the section of the power supply to which the equipment is assumed to be connected between the public electrical power distribution network and the machinery within the premises. Category II applies to equipment that is supplied with power from fixed facilities. The withstand surge voltage for the equipment with the rated voltage up to 300 V is 2500 V.

*5 This indicates the occurrence rate of conductive material in an environment where a device is used. Pollution degree 2 indicates an environment where only non-conductive pollution occurs normally and a temporary conductivity caused by condensation shall be expected depending on the conditions.

*6 Some models have ANSI/ISA 12.12.01 approval for use in Class I, Division 2 (ANSI/ISA 12.12.01, C22.2 No.213-M1987) hazardous locations. For applicable GOT models, please refer to the Mitsubishi Electric Factory Automation Global website (**www.MitsubishiElectric.com/fa/**).

Performance specifications

Item		Specifications			
		GT2715-XTBA GT2715-XTBD	GT2712-STBA GT2712-STBD	GT2712-STWA GT2712-STWD	GT2710-STBA GT2710-STBD
Display section [*1] [*2]	Display device	TFT color LCD			
	Screen size	15"	12.1"		10.4"
	Resolution	XGA: 1024 × 768 dots	SVGA: 800 × 600 dots		
	Display size	304.1(11.97) (W) × 228.1(8.98) (H) mm(inch)	246(9.69) (W) × 184.5(7.26) (H) mm(inch)		211.2(8.31) (W) × 158.4(6.24) (H) mm(inch)
	Number of displayed characters	16-dot standard font: 64 characters × 48 lines (two-byte characters) 12-dot standard font: 85 characters × 64 lines (two-byte characters)	16-dot standard font: 50 characters × 37 lines (two-byte characters) 12-dot standard font: 66 characters × 50 lines (two-byte characters)		
	Display color	65536 colors			
	Brightness adjustment	32 levels			
	Backlight	LED (not replaceable)			
	Backlight life [*4]	Approx. 60000 h (operating ambient temperature: 25 °C, display intensity: 50%)			
Touch panel [*3] [*11]	Type	Analog resistive film			
	Key size	Minimum 2 × 2 dots [*8] (per key)			
	Simultaneous press	Up to two points			
	Life	1 million touches or more (operating force: 0.98 N or less)			
Panel color		Black	White		Black
Human sensor	Detection length	1 m			—
	Detection temperature	Temperature difference between human body and ambient air: 4 °C or higher			—
User memory	User memory capacity	Memory for storage (ROM) [*12]: 57 MB Memory for operation (RAM): 128 MB			
	Life (number of write times)	100000 times			
Built-in clock precision		±90 seconds/month (ambient temperature: 25 °C)			
Battery		GT11-50BAT lithium battery			
	Data to be backed up	SRAM data, clock data, system status log data			
	Life	Approx. 5 years (ambient temperature: 25 °C)			
Built-in interface	RS-232	1 channel Transmission speed: 115200, 57600, 38400, 19200, 9600, 4800 bps Connector shape: D-sub 9-pin (male)			
	RS-422/485	1 channel Transmission speed: 115200, 57600, 38400, 19200, 9600, 4800 bps Connector shape: D-sub 9-pin (female)			
	Ethernet	1 channel Data transfer method: 100BASE-TX, 10BASE-T Connector shape: RJ-45 (modular jack)			
	USB (host)	2 channels (front face, rear face)	1 channel (rear face)		2 channels (front face, rear face)
		USB version: USB 2.0 (High-Speed 480 Mbps), Connector shape: USB-A			
	USB (device)	1 channel (front face)	1 channel (rear face)		1 channel (front face)
		USB version: USB 2.0 (High-Speed 480 Mbps), Connector shape: USB Mini-B			
	SD memory card [*12]	1 channel, SDHC compliant (maximum 32 GB)			
	Extension interface [*7]	For installing a communication unit or an option unit			
	Auxiliary extension interface	For installing an option unit			
	Side interface	For installing a communication unit			
Buzzer output		Single tone (tone and tone length adjustable)			
POWER LED		2 colors (blue and orange)			
Protective structure [*5]		Front: IP67F [*6] [*9] Inside control panel: IP2X			
Safety standards, radio laws (as of December 2019)		CE, UL, cUL, EAC, KC	CE, ATEX [*10], UL, cUL, Class I Division 2, EAC, KC, KCs [*10]		CE, UL, cUL, EAC, KC
External dimensions		397(15.63) (W) × 300(11.81) (H) × 60(2.36) (D) mm(inch)	316(12.44) (W) × 246(9.69) (H) × 52(2.05) (D) mm(inch)		303(11.93) (W) × 218(8.58) (H) × 52(2.05) (D) mm(inch)
Panel cut dimensions		383.5(15.10) (W) × 282.5(11.12) (H) mm(inch)	302(11.89) (W) × 228(8.98) (H) mm(inch)		289(11.38) (W) × 200(7.87) (H) mm(inch)
Weight (excluding a fitting)		4.5(9.9) kg(lb)	2.4(5.3) kg(lb)		2.1(4.6) kg(lb)
Compatible software package		GT Works3 Version1.225K or later			

*1 As a characteristic of liquid crystal display panels, bright dots (always lit) and dark dots (never lit) may appear on the panel. Since liquid crystal display panels comprise a great number of display elements, the appearance of bright and dark dots cannot be reduced to zero. Individual differences in liquid crystal display panels may cause differences in color, uneven brightness and flickering. Note that these phenomena are characteristics of liquid crystal display panels and it does not mean the products are defective or damaged.

*2 Flickering may occur due to vibration, shock, or the display colors.

*3 When a stylus is used, the touch panel has a life of 100 thousand touches. The stylus must satisfy the following specifications.
• Material: polyacetal resin • Tip radius: 0.8 mm or more

*4 To prevent the display section from burning in and lengthen the backlight life, enable the screen save function and turn off the backlight.

*5 Note that the structure does not guarantee protection in all users' environments. The GOT may not be used in certain environments where it is subjected to splashing oil or chemicals for a long period of time or soaked in oil mist.

Power supply specifications

Item		Specifications								
		GT2715-XTBA	GT2712-STBA GT2712-STWA	GT2710-STBA GT2710-VTBA GT2710-VTWA	GT2708-STBA GT2708-VTBA	GT2715-XTBD	GT2712-STBD GT2712-STWD	GT2710-STBD GT2710-VTBD GT2710-VTWD	GT2708-STBD GT2708-VTBD	GT2705-VTBD
Power supply voltage		100 V AC to 240 V AC (+10%, −15%)				24 V DC (+25%, −20%)				
Power supply frequency		50 Hz/60 Hz (±5%)				—				
Power consumption	Under the maximum load	51 W or less	44 W or less	41 W or less	41 W or less	48 W or less	45 W or less	42 W or less	39 W or less	30 W or less
	Main unit	25 W	19 W	17 W	15 W	23 W	18 W	15 W	13 W	7 W
	Main unit (backlight OFF)	10 W	10 W	10 W	10 W	8 W	8 W	8 W	8 W	5 W
Inrush current		40 A or less (3 ms, ambient temperature: 25 °C, under the maximum load)	60 A or less (2 ms, ambient temperature: 25 °C, under the maximum load)			5 A or less (20 ms, ambient temperature: 25 °C, under the maximum load)				69 A or less (1 ms, ambient temperature: 25 °C, under the maximum load)
Permissible instantaneous power failure time		20 ms or less (100 V AC or more)				10 ms or less				
Noise immunity		Noise voltage: 1500 Vp-p, noise width: 1 μs, measured by a noise simulator with noise frequency ranging from 25 Hz to 60 Hz				Noise voltage: 500 Vp-p, noise width: 1 μs, measured by a noise simulator with noise frequency ranging from 25 Hz to 60 Hz				
Withstand voltage		1500 V AC for 1 minute across power terminals and earth				350 V AC for 1 minute across power terminals and earth				
Insulation resistance		500 V DC across power terminals and earth, 10 MΩ or more by an insulation resistance tester								

Item		Specifications				
		GT2710-VTBA GT2710-VTBD	GT2710-VTWA GT2710-VTWD	GT2708-STBA GT2708-STBD	GT2708-VTBA GT2708-VTBD	GT2705-VTBD
Display section *1 *2	Display device	TFT color LCD				
	Screen size	10.4"		8.4"		5.7"
	Resolution	VGA: 640 × 480 dots		SVGA: 800 × 600 dots		VGA: 640 × 480 dots
	Display size	211.2(8.31) (W) × 158.4(6.24) (H) mm(inch)		170.9(6.73) (W) × 128.2(5.05) (H) mm(inch)		115.2(4.54) (W) × 86.4(3.40) (H) mm(inch)
	Number of displayed characters	16-dot standard font: 40 characters × 30 lines (two-byte characters) 12-dot standard font: 53 characters × 40 lines (two-byte characters)		16-dot standard font: 50 characters × 37 lines (two-byte characters) 12-dot standard font: 66 characters × 50 lines (two-byte characters)		16-dot standard font: 40 characters × 30 lines (two-byte characters) 12-dot standard font: 53 characters × 40 lines (two-byte characters)
	Display color	65536 colors				
	Brightness adjustment	32 levels				
	Backlight	LED (not replaceable)				
	Backlight life *4	Approx. 60000 h (operating ambient temperature: 25 °C, display intensity: 50%)				
Touch panel *3 *11	Type	Analog resistive film				
	Key size	Minimum 2 × 2 dots *8 (per key)				
	Simultaneous press	Up to two points				
	Life	1 million touches or more (operating force: 0.98 N or less)				
Panel color		Black	White	Black		
Human sensor	Detection length	—				
	Detection temperature	—				
User memory	User memory capacity	Memory for storage (ROM) *12: 57 MB Memory for operation (RAM): 128 MB				Memory for storage (ROM) *12: 32 MB Memory for operation (RAM): 80 MB
	Life (number of write times)	100000 times				
Built-in clock precision		±90 seconds/month (ambient temperature: 25 °C)				
Battery		GT11-50BAT lithium battery				
	Data to be backed up	SRAM data, clock data, system status log data				
	Life	Approx. 5 years (ambient temperature: 25 °C)				
Built-in interface	RS-232	1 channel Transmission speed: 115200, 57600, 38400, 19200, 9600, 4800 bps Connector shape: D-sub 9-pin (male)				
	RS-422/485	1 channel Transmission speed: 115200, 57600, 38400, 19200, 9600, 4800 bps Connector shape: D-sub 9-pin (female)				
	Ethernet	1 channel Data transfer method: 100BASE-TX, 10BASE-T Connector shape: RJ-45 (modular jack)				
	USB (host)	2 channels (front face, rear face)	1 channel (rear face)	2 channels (front face, rear face)		
		USB version: USB 2.0 (High-Speed 480 Mbps), Connector shape: USB-A				
	USB (device)	1 channel (front face)	1 channel (rear face)	1 channel (front face)		
		USB version: USB 2.0 (High-Speed 480 Mbps), Connector shape: USB Mini-B				
	SD memory card *12	1 channel, SDHC compliant (maximum 32 GB)				
	Extension interface *7	For installing a communication unit or an option unit				
	Auxiliary extension interface	For installing an option unit				—
	Side interface	For installing a communication unit				
Buzzer output		Single tone (tone and tone length adjustable)				
POWER LED		2 colors (blue and orange)				
Protective structure *5		Front: IP67F *6 *9 Inside control panel: IP2X				
Safety standards, radio laws (as of December 2019)		CE, UL, cUL, EAC, KC	CE, ATEX *10, UL, cUL, Class I Division 2, EAC, KC, KCs *10	CE, UL, cUL, EAC, KC		
External dimensions		303(11.93) (W) × 218(8.58) (H) × 52(2.05) (D) mm(inch)		241(9.49) (W) × 194(7.64) (H) × 52(2.05) (D) mm(inch)		167(6.57) (W) × 139(5.47) (H) × 60(2.36) (D) mm(inch)
Panel cut dimensions		289(11.38) (W) × 200(7.87) (H) mm(inch)		227(8.94) (W) × 176(6.93) (H) mm(inch)		153(6.02) (W) × 121(4.76) (H) mm(inch)
Weight (excluding a fitting)		2.1(4.6) kg(lb)		1.5(3.3) kg(lb)		1.0(2.2) kg(lb)
Compatible software package		GT Works3 Version1.225K or later				

*6   To conform to IP67F, close the USB environmental protection cover by pushing the [PUSH] mark firmly. (The GOT conforms to IP2X when the USB environmental protection cover is open.)

*7   When using a GT2705-VTBD with multiple devices such as extension units, a barcode reader, and an RFID controller, the total amount of current must be within the maximum amount of current supplied by the GT2705-VTBD. For the details, please refer to the relevant manual of the GOT2000 Series.

*8   The minimum size of a key that can be arranged. To ensure safe use of the product, the following settings are recommended.
    • Key size: 16 × 16 dots or larger   • Distance between keys: 16 dots or more

*9   The suffix "F" of IP67F is a symbol that indicates protection rate against oil. It is described in the Appendix of Japanese Industrial Standard JIS C 0920.

*10   ATEX and KCs are supported by GT2712-STWD and GT2710-VTWD (24 V DC power supply type) only.

*11   Repeatedly touching the outer edge of the actual display area may cause the product to fail.

*12   While writing data to the memory for storage (ROM) or an SD memory card, if GOT is powered off, the data may be corrupted which may cause the GOT to stop operating.

8

Specifications

Specifications

GT25 model
* For the specifications of GT25 wide models, GT25 handy GOT, and GT25 rugged model, please refer to pages 128 to 131.

General specifications

Item	Specifications				
Operating ambient temperature [*1]	0 ℃ to 55 ℃ [*2] [*7]				
Storage ambient temperature	−20 ℃ to 60 ℃				
Operating ambient humidity	10% RH to 90% RH, non-condensing [*8]				
Storage ambient humidity	10% RH to 90% RH, non-condensing [*8]				
Vibration resistance	Compliant with JIS B 3502 and IEC 61131-2		Frequency	Acceleration	Half amplitude	Sweep count
		Under intermittent vibration	5 to 8.4 Hz	—	3.5 mm	10 times in each X, Y, or Z direction
			8.4 to 150 Hz	9.8 m/s²	—	
		Under continuous vibration	5 to 8.4 Hz	—	1.75 mm	—
			8.4 to 150 Hz	4.9 m/s²	—	
Shock resistance	Compliant with JIS B 3502 and IEC 61131-2 (147 m/s² (15G), 3 times in each X, Y, or Z direction)				
Operating atmosphere [*6]	No greasy fumes, corrosive gas, flammable gas, excessive conductive dust, and direct sunlight (as well as at storage)				
Operating altitude [*3]	2000 m or less				
Installation location	Inside control panel				
Overvoltage category [*4]	II or less				
Pollution degree [*5]	2 or less				
Cooling method	Self-cooling				
Grounding	Grounding with a ground resistance of 100 Ω or less by using a ground cable that has a cross-sectional area of 2 mm² or more. If impossible, connect the ground cable to the control panel.				

Operate and store the GOT in environments without direct sunlight, high temperature, dust, humidity, and vibrations.

For the status of conforming to various standards and laws (CE, ATEX, UL/cUL, Class I Division 2, EAC, KC, KCs, and maritime certifications [ABS/BV/DNV GL/LR/NK/RINA]), please refer to the Mitsubishi Electric Factory Automation Global website (**www.MitsubishiElectric.com/fa/**).

[*1] Includes the temperature inside the enclosure of the control panel to which the GOT is installed.

[*2] When any of the following units or option is mounted, the maximum operating ambient temperature must be 5℃ lower than the one described in the general specifications: MELSECNET/H communication unit (GT15-J71LP23-25, GT15-J71BR13), CC-Link communication unit (GT15-J61BT13), protective cover for oil.

[*3] Do not use or store the GOT under a pressure higher than the atmospheric pressure at altitude 0 m. Doing so may cause a malfunction. Air purging by applying pressure to the control panel may create clearance between the surface sheet and the touch panel. This may cause the touch panel to be not sensitive enough or the sheet to come off.

[*4] This indicates the section of the power supply to which the equipment is assumed to be connected between the public electrical power distribution network and the machinery within the premises. Category II applies to equipment that is supplied with power from fixed facilities. The withstand surge voltage for the equipment with the rated voltage up to 300 V is 2500 V.

[*5] This indicates the occurrence rate of conductive material in an environment where a device is used. Pollution degree 2 indicates an environment where only non-conductive pollution occurs normally and a temporary conductivity caused by condensation shall be expected depending on the conditions.

[*6] Some models have ANSI/ISA 12.12.01 approval for use in Class I, Division 2 (ANSI/ISA 12.12.01, C22.2 No.213-M1987) hazardous locations. For applicable GOT models, please refer to the Mitsubishi Electric Factory Automation Global website (**www.MitsubishiElectric.com/fa/**).

[*7] When GT2505-VTBD is installed vertically, the operating ambient temperature must be between 0 ℃ and 50 ℃.

[*8] If the ambient temperature of GT2505-VTBD exceeds 40 ℃, the absolute humidity must not exceed 90% RH at 40 ℃.

Performance specifications

Item		Specifications				
		GT2512-STBA GT2512-STBD	GT2512F-STNA GT2512F-STND	GT2510-VTBA GT2510-VTBD	GT2510-VTWA GT2510-VTWD	GT2510F-VTNA GT2510F-VTND
Display section [*1] [*2]	Display device	TFT color LCD				
	Screen size	12.1"		10.4"		
	Resolution	SVGA: 800 × 600 dots		VGA: 640 × 480 dots		
	Display size	246(9.69) (W) × 184.5(7.26) (H) mm(inch)		211.2(8.31) (W) × 158.4(6.24) (H) mm(inch)		
	Number of displayed characters	16-dot standard font: 50 characters × 37 lines (two-byte characters) 12-dot standard font: 66 characters × 50 lines (two-byte characters)		16-dot standard font: 40 characters × 30 lines (two-byte characters) 12-dot standard font: 53 characters × 40 lines (two-byte characters)		
	Display color	65536 colors				
	Brightness adjustment	32 levels				
	Backlight	LED (not replaceable)				
	Backlight life [*4]	Approx. 60000 h (operating ambient temperature: 25 ℃, display intensity: 50%)				
Touch panel [*3] [*12]	Type	Analog resistive film				
	Key size	Minimum 2 × 2 dots [*9] (per key)				
	Simultaneous press	Not available [*5] (Only 1 point can be touched.)				
	Life	1 million touches or more (operating force: 0.98 N or less)				
Panel color		Black	—	Black	White	—
User memory	User memory capacity	Memory for storage (ROM) [*13]: 32 MB Memory for operation (RAM): 80 MB				
	Life (number of write times)	100000 times				
Built-in clock precision		±90 seconds/month (ambient temperature: 25 ℃)				
Battery		GT11-50BAT lithium battery				
	Data to be backed up	SRAM data, clock data, system status log data				
	Life	Approx. 5 years (ambient temperature: 25 ℃)				
Built-in interface	RS-232	1 channel Transmission speed: 115200, 57600, 38400, 19200, 9600, 4800 bps Connector shape: D-sub 9-pin (male)				
	RS-422/485	1 channel Transmission speed: 115200, 57600, 38400, 19200, 9600, 4800 bps Connector shape: D-sub 9-pin (female)				
	Ethernet	1 channel Data transfer method: 100BASE-TX, 10BASE-T Connector shape: RJ-45 (modular jack)				
	USB (host)	2 channels (front face, rear face)	1 channel (rear face)	2 channels (front face, rear face)		1 channel (rear face)
		USB version: USB 2.0 (High-Speed 480 Mbps), Connector shape: USB-A				
	USB (device)	1 channel (front face)	1 channel (rear face)	1 channel (front face)		1 channel (rear face)
		USB version: USB 2.0 (High-Speed 480 Mbps), Connector shape: USB Mini-B				
	SD memory card [*13]	1 channel, SDHC compliant (maximum 32 GB)				
	Extension interface	For installing a communication unit or an option unit				
	Side interface	For installing a communication unit				
Buzzer output		Single tone (tone and tone length adjustable)				
POWER LED		2 colors (blue and orange)				
Protective structure [*6]		Front: IP67F [*7] [*10] Inside control panel: IP2X	Front: IP67F [*8] [*10] Inside control panel: IP2X	Front: IP67F [*7] [*10] Inside control panel: IP2X	Front: IP67F [*10] Inside control panel: IP2X	Front: IP67F [*8] [*10] Inside control panel: IP2X
Safety standards, radio laws (as of December 2019)		CE, UL, cUL, EAC, KC			CE, ATEX [*11], UL, cUL, Class I Division 2, EAC, KC, KCs [*11]	CE, UL, cUL, EAC, KC
External dimensions		316(12.44) (W) × 246(9.69) (H) × 52(2.05) (D) mm(inch)	311(12.24) (W) × 237(9.33) (H) × 54(2.13) (D) mm(inch)	303(11.93) (W) × 218(8.58) (H) × 52(2.05) (D) mm(inch)		298(11.73) (W) × 209(8.23) (H) × 54(2.13) (D) mm(inch)
Panel cut dimensions		302(11.89) (W) × 228(8.98) (H) mm(inch)	269(10.59) (W) × 214(8.43) (H) mm(inch)	289(11.38) (W) × 200(7.87) (H) mm(inch)		234(9.21) (W) × 187(7.36) (H) mm(inch)
Weight (excluding a fitting)		2.4(5.3) kg(lb)		2.1(4.6) kg(lb)		
Compatible software package		GT Works3 Version1.225K or later				

[*1] As a characteristic of liquid crystal display panels, bright dots (always lit) and dark dots (never lit) may appear on the panel. Since liquid crystal display panels comprise a great number of display elements, the appearance of bright and dark dots cannot be reduced to zero. Individual differences in liquid crystal display panels may cause differences in color, uneven brightness and flickering. Note that these phenomena are characteristics of liquid crystal display panels and it does not mean the products are defective or damaged.

[*2] Flickering may occur due to vibration, shock, or the display colors.

[*3] When a stylus is used, the touch panel has a life of 100 thousand touches. The stylus must satisfy the following specifications.
• Material: polyacetal resin • Tip radius: 0.8 mm or more

[*4] To prevent the display section from burning in and lengthen the backlight life, enable the screen save function and turn off the backlight.

[*5] If you touch two points or more simultaneously on the touch panel, a touch switch near the touched points may operate unexpectedly. Do not touch two points or more simultaneously on the touch panel.

[*6] Note that the structure does not guarantee protection in all users' environments. The GOT may not be used in certain environments where it is subjected to splashing oil or chemicals for a long period of time or soaked in oil mist.

Power supply specifications

Item		Specifications						
		GT2512-STBA GT2512F-STNA	GT2510-VTBA GT2510-VTWA GT2510F-VTNA	GT2508-VTBA GT2508-VTWA GT2508F-VTNA	GT2512-STBD GT2512F-STND	GT2510-VTBD GT2510-VTWD GT2510F-VTND	GT2508-VTBD GT2508-VTWD GT2508F-VTND	GT2505-VTBD
Power supply voltage		100 V AC to 240 V AC (+10%, −15%)			24 V DC (+25%, −20%)			24 V DC (+10%, -15%)
Power supply frequency		50 Hz/60 Hz (±5%)			—			
Power consumption	Under the maximum load	35 W or less	34 W or less	31 W or less	37 W or less	33 W or less	31 W or less	8.4 W or less
	Main unit	14 W	12 W	11 W	13 W	10 W	8 W	4.3 W
	Main unit (backlight OFF)	7 W	7 W	7 W	6 W	6 W	6 W	2.6 W
Inrush current		60 A or less (2 ms, ambient temperature: 25 °C, under the maximum load)			5 A or less (20 ms, ambient temperature: 25 °C, under the maximum load)			42 A or less (2 ms, ambient temperature: 25 °C, under the maximum load)
Permissible instantaneous power failure time		20 ms or less (100 V AC or more)			10 ms or less			
Noise immunity		Noise voltage: 1500 Vp-p, noise width: 1 µs, measured by a noise simulator with noise frequency ranging from 25 Hz to 60 Hz			Noise voltage: 500 Vp-p, noise width: 1 µs, measured by a noise simulator with noise frequency ranging from 25 Hz to 60 Hz			Noise voltage: 1000 Vp-p, noise width: 1 µs, measured by a noise simulator with noise frequency ranging from 30 Hz to 100 Hz
Withstand voltage		1500 V AC for 1 minute across power terminals and earth			350 V AC for 1 minute across power terminals and earth			500 V AC for 1 minute across power terminals and earth
Insulation resistance		500 V DC across power terminals and earth, 10 MΩ or more by an insulation resistance tester						

Item		Specifications			
		GT2508-VTBA GT2508-VTBD	GT2508-VTWA GT2508-VTWD	GT2508F-VTNA GT2508F-VTND	GT2505-VTBD
Display section *1 *2	Display device	TFT color LCD			
	Screen size	8.4"			5.7"
	Resolution	VGA: 640 × 480 dots			
	Display size	170.9(6.73) (W) × 128.2(5.05) (H) mm(inch)			115.2(4.54) (W) × 86.4(3.40) (H) mm(inch)
	Number of displayed characters	16-dot standard font: 40 characters × 30 lines (two-byte characters) 12-dot standard font: 53 characters × 40 lines (two-byte characters)			
	Display color	65536 colors			
	Brightness adjustment	32 levels			
	Backlight	LED (not replaceable)			
	Backlight life *4	Approx. 60000 h (operating ambient temperature: 25 °C, display intensity: 50%)			
Touch panel *3 *12	Type	Analog resistive film			
	Key size	Minimum 2 × 2 dots *9 (per key)			
	Simultaneous press	Not available *5 (Only 1 point can be touched.)			
	Life	1 million touches or more (operating force: 0.98 N or less)			
Panel color		Black	White	—	Black
User memory	User memory capacity	Memory for storage (ROM) *13: 32 MB Memory for operation (RAM): 80 MB			
	Life (number of write times)	100000 times			
Built-in clock precision		±90 seconds/month (ambient temperature: 25 °C)			
Battery		GT11-50BAT lithium battery			
	Data to be backed up	SRAM data, clock data, system status log data			
	Life	Approx. 5 years (ambient temperature: 25 °C)			
Built-in interface	RS-232	1 channel Transmission speed: 115200, 57600, 38400, 19200, 9600, 4800 bps Connector shape: D-sub 9-pin (male)			
	RS-422/485	1 channel Transmission speed: 115200, 57600, 38400, 19200, 9600, 4800 bps Connector shape: D-sub 9-pin (female)			
	Ethernet	1 channel Data transfer method: 100BASE-TX, 10BASE-T Connector shape: RJ-45 (modular jack)			
	USB (host)	2 channels (front face, rear face)	1 channel (rear face)		1 channel (rear face)
		USB version: USB 2.0 (High-Speed 480 Mbps), Connector shape: USB-A			
	USB (device)	1 channel (front face)	1 channel (rear face)		1 channel (front face)
		USB version: USB 2.0 (High-Speed 480 Mbps), Connector shape: USB Mini-B			
	SD memory card *13	1 channel, SDHC compliant (maximum 32 GB)			
	Extension interface	For installing a communication unit or an option unit			—
	Side interface	For installing a communication unit			—
Buzzer output		Single tone (tone and tone length adjustable)			
POWER LED		2 colors (blue and orange)			
Protective structure *6		Front: IP67F *7 *10 Inside control panel: IP2X	Front: IP67F *10 Inside control panel: IP2X	Front: IP67F *8 *10 Inside control panel: IP2X	Front: IP67F *7 *10 Inside control panel: IP2X
Safety standards, radio laws (as of December 2019)		CE, UL, cUL, EAC, KC	CE, ATEX *11, UL, cUL, Class I Division 2, EAC, KC, KCs *11		CE, UL, cUL, EAC, KC
External dimensions		241(9.49) (W) × 194(7.64) (H) × 52(2.05) (D) mm(inch)		236(9.29) (W) × 185(7.28) (H) × 54(2.13) (D) mm(inch)	164(6.46) (W) × 139(5.47) (H) × 53.5(2.11) (D) mm(inch)
Panel cut dimensions		227(8.94) (W) × 176(6.93) (H) mm(inch)		194(7.64) (W) × 158(6.22) (H) mm(inch)	153(6.02) (W) × 121(4.76) (H) mm(inch)
Weight (excluding a fitting)		1.5(3.3) kg(lb)			0.6(1.3) kg(lb)
Compatible software package		GT Works3 Version1.225K or later			

*7   To conform to IP67F, close the USB environmental protection cover by pushing the [PUSH] mark or the [PULL] mark firmly. (The GOT conforms to IP2X when the USB environmental protection cover is open.)

*8   To conform to IP67F attach the environmental protection sheet.

*9   The minimum size of a key that can be arranged. To ensure safe use of the product, the following settings are recommended.
   • Key size: 16 × 16 dots or larger   • Distance between keys: 16 dots or more

*10   The suffix "F" of IP67F is a symbol that indicates protection rate against oil. It is described in the Appendix of Japanese Industrial Standard JIS C 0920.

*11   ATEX and KCs are supported by GT2510-VTWD and GT2508-VTWD (24 V DC power supply type) only.

*12   Repeatedly touching the outer edge of the actual display area may cause the product to fail.

*13   While writing data to the memory for storage (ROM) or an SD memory card, if GOT is powered off, the data may be corrupted which may cause the GOT to stop operating.

Specifications

GT25 wide model/GT25 handy GOT

General specifications

Item	Specifications	
	GT25 wide model	GT25 handy GOT
Operating ambient temperature [1]	0 ℃ to 55 ℃ [5]	0 ℃ to 40 ℃
Storage ambient temperature	-20 ℃ to 60 ℃	
Operating ambient humidity	10% RH to 90% RH, non-condensing	
Storage ambient humidity	10% RH to 90% RH, non-condensing	
Vibration resistance	Compliant with JIS B 3502 and IEC 61131-2	(see sub-table below)
Shock resistance	Compliant with JIS B 3502 and IEC 61131-2 (147 m/s² (15G), 3 times in each X, Y, or Z direction)	
Operating atmosphere	No greasy fumes, corrosive gas, flammable gas, excessive conductive dust, and direct sunlight (as well as at storage)	
Operating altitude [2]	2000 m or less	
Installation location	Inside control panel	—
Overvoltage category [3]	II or less	
Pollution degree [4]	2 or less	
Cooling method	Self-cooling	
Grounding	Grounding with a ground resistance of 100 Ω or less by using a ground cable that has a cross-sectional area of 2 mm² or more. If impossible, connect the ground cable to the control panel.	

Vibration resistance sub-table:

	Frequency	Acceleration	Half amplitude	Sweep count
Under intermittent vibration	5 to 8.4 Hz	—	3.5 mm	10 times in each X, Y, or Z direction
	8.4 to 150 Hz	9.8 m/s²	—	
Under continuous vibration	5 to 8.4 Hz	—	1.75 mm	—
	8.4 to 150 Hz	4.9 m/s²	—	

[1] Includes the temperature inside the enclosure of the control panel to which the GOT is installed. (GT25 wide model)

[2] Do not use or store the GOT under a pressure higher than the atmospheric pressure at altitude 0 m. Doing so may cause a malfunction. Air purging by applying pressure to the control panel may create clearance between the surface sheet and the touch panel. This may cause the touch panel to be not sensitive enough or the sheet to come off.

[3] This indicates the section of the power supply to which the equipment is assumed to be connected between the public electrical power distribution network and the machinery within the premises. Category II applies to equipment that is supplied with power from fixed facilities. The withstand surge voltage for the equipment with the rated voltage up to 300 V is 2500 V.

[4] This indicates the occurrence rate of conductive material in an environment where a device is used. Pollution degree 2 indicates an environment where only non-conductive pollution occurs normally and a temporary conductivity caused by condensation shall be expected depending on the conditions.

[5] When a protective cover for oil is mounted on the GOT, the maximum operating ambient temperature must be 5°C lower than the one described in the general specifications.

Operate and store the GOT in environments without direct sunlight, high temperature, dust, humidity, and vibrations.

For the status of conforming to various standards and laws (CE, ATEX, UL/cUL, Class I Division 2, EAC, KC, KCs, and maritime certifications [ABS/BV/DNV GL/LR/NK/RINA]), please refer to the Mitsubishi Electric Factory Automation Global website (**www.MitsubishiElectric.com/fa/**).

Performance specifications

Item		Specifications			
		GT25 wide model			
		GT2510-WXTBD	GT2510-WXTSD	GT2507-WTBD	GT2507-WTSD
Display section [1] [2]	Display device	TFT color LCD			
	Screen size	10.1" widescreen		7" widescreen	
	Resolution	WXGA: 1280 × 800 dots		WVGA: 800 × 480 dots	
	Display size	216.96(8.54) (W) × 135.6(5.34) (H) mm(inch)		152.40(6.00) (W) × 91.44(3.60) (H) mm (inch)	
	Number of displayed characters	16-dot standard font: 80 characters × 50 lines (two-byte characters) 12-dot standard font: 106 characters × 66 lines (two-byte characters)		16-dot standard font: 50 characters × 30 lines (two-byte characters) 12-dot standard font: 66 characters × 40 lines (two-byte characters)	
	Display color	65536 colors			
	Brightness adjustment	32 levels			
	Backlight	LED (not replaceable)			
	Backlight life [4]	Approx. 50000 h (operating ambient temperature: 25°C, display intensity: 50%)			
Touch panel [3] [11]	Type	Analog resistive film			
	Key size	Minimum 2 × 2 dots [8] (per key)			
	Simultaneous press	Not available [5] (Only 1 point can be touched.)			
	Life	1 million touches or more (operating force: 0.98 N or less)			
Panel color		Black	Silver [10]	Black	Silver [10]
User memory	User memory capacity	Memory for storage (ROM) [12]: 32 MB Memory for operation (RAM): 128 MB			
	Life (number of write times)	100000 times			
Built-in clock precision		±90 seconds/month (ambient temperature: 25 ℃)			
Battery		GT11-50BAT lithium battery			
	Data to be backed up	SRAM data, clock data, system status log data			
	Life	Approx. 5 years (ambient temperature: 25 ℃)			
Built-in interface	RS-232	1 channel Transmission speed: 115200, 57600, 38400, 19200, 9600, 4800 bps Connector shape: D-sub 9-pin (male)			
	RS-422/485	1 channel Transmission speed: 115200, 57600, 38400, 19200, 9600, 4800 bps Connector shape: D-sub 9-pin (female)			
	Ethernet	2 channel Data transfer method: 100BASE-TX, 10BASE-T Connector shape: RJ-45 (modular jack)			
	USB (host)	1 channel (rear face)			
		USB version: USB 2.0 (High-Speed 480 Mbps), Connector shape: USB-A			
	USB (device)	1 channel (front face)			
		USB version: USB 2.0 (High-Speed 480 Mbps), Connector shape: USB Mini-B			
	SD memory card [12]	1 channel, SDHC compliant (maximum 32 GB)			
	Wireless LAN communication unit interface	For installing a wireless LAN communication unit			
	Sound output interface	1 channel, WAV format (16 bits, 8.000 kHz/16.000 kHz, monoral) applicable plug: Φ3.5 stereo mini-plug (3-prong)			
Buzzer output		Single tone (tone and tone length adjustable)			
POWER LED		2 colors (blue and orange)			
Protective structure [6]		Front: IP67F [7] [9] Inside control panel: IP2X			
Safety standards, radio laws (as of December 2019)		CE, UL, cUL, EAC, KC			
External dimensions		252(9.92) (W) × 194(7.64) (H) × 48(1.89) (D) mm(inch)		189(7.44) (W) × 142(5.59) (H) × 48(1.89) (D) mm(inch)	
Panel cut dimensions		243.5(9.59) (W) × 185.5(7.30) (H) mm(inch)		180.5(7.11) (W) × 133.5(5.26) (H) mm(inch)	
Weight (excluding a fitting)		1.2(2.6) kg(lb)		0.75(1.7) kg(lb)	
Compatible software package		GT Works3 Version1.225K or later			

[1] As a characteristic of liquid crystal display panels, bright dots (always lit) and dark dots (never lit) may appear on the panel. Since liquid crystal display panels comprise a great number of display elements, the appearance of bright and dark dots cannot be reduced to zero. Individual differences in liquid crystal display panels may cause differences in color, uneven brightness and flickering. Note that these phenomena are characteristics of liquid crystal display panels and it does not mean the products are defective or damaged.

[2] Flickering may occur due to vibration, shock, or the display colors.

[3] When a stylus is used, the touch panel has a life of 100 thousand touches. The stylus must satisfy the following specifications.
• Material: polyacetal resin   • Tip radius: 0.8 mm or more

[4] To prevent the display section from burning in and lengthen the backlight life, enable the screen save function and turn off the backlight.

[5] If you touch two points or more simultaneously on the touch panel, a touch switch near the touched points may operate unexpectedly. Do not touch two points or more simultaneously on the touch panel.

[6] Note that the structure does not guarantee protection in all users' environments. The GOT may not be used in certain environments where it is subjected to splashing oil or chemicals for a long period of time or soaked in oil mist.

[7] To conform to IP67F, close the USB environmental protection cover by pushing the [PULL] mark firmly. (The GOT conforms to IP2X when the USB environmental protection cover is open.)

[8] The minimum size of a key that can be arranged. To ensure safe use of the product, the following settings are recommended.
• Key size: 16 × 16 dots or larger   • Distance between keys: 16 dots or more

[9] The suffix "F" of IP67F is a symbol that indicates protection rate against oil. It is described in the Appendix of Japanese Industrial Standard JIS C 0920.

Power supply specifications

Item	Specifications			
	GT25 wide model		GT25 handy GOT	
	GT2510-WXTBD GT2510-WXTSD	GT2507-WTBD GT2507-WTSD	GT2506HS-VTBD	GT2505HS-VTBD
Power supply voltage	24 V DC (+25%, -20%)		24 V DC (+10%, -15%)	
Power consumption — Under the maximum load	16 W or less		11.6 W or less	8.4 W or less
Power consumption — Main unit	9 W		—	
Power consumption — Main unit (backlight OFF)	5 W		8.2 W	7.0 W
Inrush current	59 A or less (2 ms, ambient temperature: 25 °C, under the maximum load)		30 A or less (2 ms, ambient temperature: 25 °C, under the maximum load)	
Permissible instantaneous power failure time	5 ms or less			
Noise immunity	Noise voltage: 500 Vp-p, noise width: 1 µs, measured by a noise simulator with noise frequency ranging from 25 Hz to 60 Hz		Noise voltage: 1000 Vp-p, noise width: 1 µs, measured by a noise simulator with noise frequency ranging from 30 Hz to 100 Hz	
Withstand voltage	350 V AC for 1 minute across power terminals and earth		500 V DC for 1 minute across power terminals and earth	
Insulation resistance	500 V DC across power terminals and earth, 10 MΩ or more by an insulation resistance tester			

Item	Specifications	
	GT25 handy GOT	
	GT2506HS-VTBD	GT2505HS-VTBD
Display section *1 *2 — Display device	TFT color LCD	
Display section *1 *2 — Screen size	6.5"	5.7"
Display section *1 *2 — Resolution	VGA: 640 × 480 dots	
Display section *1 *2 — Display size	132.5(5.22) (W) × 99.4(3.91) (H) mm(inch)	115.2(4.54) (W) × 86.4(3.40) (H) mm(inch)
Display section *1 *2 — Number of displayed characters	16-dot standard font: 40 characters × 30 lines (two-byte characters) 12-dot standard font: 53 characters × 40 lines (two-byte characters)	
Display section *1 *2 — Display color	65536 colors	
Display section *1 *2 — Brightness adjustment	32 levels	
Display section *1 *2 — Backlight	LED (not replaceable)	
Display section *1 *2 — Backlight life *4	Approx. 40000 h (operating ambient temperature: 25 °C, display intensity: 50%)	Approx. 60000 h (operating ambient temperature: 25 °C, display intensity: 50%)
Touch panel *3 *11 — Type	Analog resistive film	
Touch panel *3 *11 — Key size	Minimum 2 × 2 dots *8 (per key)	
Touch panel *3 *11 — Simultaneous press	Not available *5 (Only 1 point can be touched.)	
Touch panel *3 *11 — Life	1 million touches or more (operating force: 0.98 N or less)	
Panel color	Black	
Switch — Operation switch	6 switches (6 contacts/common), N/O contact, Maximum rating 10 mA/24 V DC, Life: 1000000 times, 6 green LEDs (lighting control from display section)	6 switches (6 contacts/common), N/O contact, Maximum rating 10 mA/24 V DC, Life: 1000000 times
Switch — Grip switch	1 switch (single wiring) (IDEC HE3B-M2PB), Enable switch (deadman switch) 3-position system of OFF ↔ ON ↔ OFF, 2 N/O contacts, Maximum rating 1 A/24 V DC (resistance load), Maximum rating 0.3 A/24 V DC (induction load), Life: 100000 times, 1 green LED (lighting control from display section)	
Switch — Emergency stop switch	1 switch (single wiring) (IDEC XA1E-BV303R), 3 N/C contacts, Maximum rating 1 A/24 V DC (resistance load), Maximum rating 0.3 A/24 V DC (induction load), Life: 100000 times	
Switch — Keylock switch (2-position switch)	1 switch (single wiring) (IDEC AS6M-2KT1PB), 2-notch type (Manual stop at each position/A key can be inserted and removed on only the left side./ On the right side, a key cannot be removed./Two keys are provided.), 2-position, Maximum rating 1 A/24 V DC (resistance load), Maximum rating 0.3 A/24 V DC (induction load), Life: 100000 times	
User memory — User memory capacity	Memory for storage (ROM) *12: 32 MB Memory for operation (RAM): 80 MB	
User memory — Life (number of write times)	100000 times	
Built-in clock precision	±90 seconds/month (ambient temperature: 25 °C)	
Battery —	GT15-BAT lithium battery	GT11-50BAT lithium battery
Battery — Data to be backed up	SRAM data, clock data, system status log data	
Battery — Life	Approx. 5 years (ambient temperature: 25 °C)	
Built-in interface — RS-232	RS-232 or RS-422/485, 1 channel (Select one channel. RS-422/485 is set as the factory default.) Transmission speed: 115200, 57600, 38400, 19200, 9600, 4800 bps Connector shape: Square 42 pins (male)	RS-232 or RS-422, 1 channel (Select one channel from RS-232, RS-422, or Ethernet. Ethernet is set as the factory default.) Transmission speed: 115200, 57600, 38400, 19200, 9600, 4800 bps Connector shape: Round 32 pins (male)
Built-in interface — RS-422/485 *14		
Built-in interface — Ethernet	1 channel Data transfer method: 100BASE-TX, 10BASE-T Connector shape: Square 42 pins (male)	1 channel (Select one channel from RS-232, RS-422, or Ethernet. Ethernet is set as the factory default.) Data transfer method: 100BASE-TX, 10BASE-T Connector shape: Round 32 pins (male)
Built-in interface — USB (host)	1 channel (top face)	
	USB version: USB 2.0 (High-Speed 480 Mbps), Connector shape: USB-A	
Built-in interface — USB (device)	1 channel (top face)	
	USB version: USB 2.0 (High-Speed 480 Mbps), Connector shape: USB Mini-B	
Built-in interface — SD memory card *12	1 channel, SDHC compliant (maximum 32 GB)	
Buzzer output	Single tone (tone and tone length adjustable)	
POWER LED	2 colors (blue and orange)	
Protective structure *6	IP65F *9*13 (When an external cable is connected. The rating is not applied to the relay connector side of the external cable.)	
Safety standards, radio laws (as of December 2019)	CE, UL, cUL, EAC, KC	
External dimensions	201(7.91) (W) × 230(9.06) (H) × 97(3.82) (D) mm(inch) (excluding projections such as the emergency stop switch)	145(5.71) (W) × 185(7.28) (H) × 79.3(3.12) (D) mm(inch) (excluding projections such as the emergency stop switch)
Weight	1.2(2.6) kg(lb) (GOT main unit only)	0.79(1.7) kg(lb) (GOT main unit only)
Compatible software package	GT Works3 Version1.225K or later	

*10 The lower part of the panel including the USB environmental protection cover is black.

*11 Repeatedly touching the outer edge of the actual display area may cause the product to fail.

*12 While writing data to the memory for storage (ROM) or an SD memory card, if GOT is powered off, the data may be corrupted which may cause the GOT to stop operating.

*13 The rating is not applied when the interface environment protection cover or the environmental protection back cover is removed.

*14 GT2505HS-VTBD supports RS-422 only.

8

Specifications

Specifications

GT25 rugged model

General specifications

Item	Specifications *5					
Operating ambient temperature *1	-20 ℃ to 65 ℃					
Storage ambient temperature	-30 ℃ to 75 ℃					
Operating ambient humidity	10% RH to 90% RH, non-condensing					
Storage ambient humidity	10% RH to 90% RH, non-condensing					
Vibration resistance	Compliant with IEC 60068-2-6		Frequency	Acceleration	Half amplitude	Sweep count
		Under intermittent vibration	5 to 8.4 Hz	—	7.0 mm	10 times in each X, Y, or Z direction
			8.4 to 150 Hz	19.6 m/s²	—	
		Under continuous vibration	5 to 8.4 Hz	—	7.0 mm	—
			8.4 to 150 Hz	19.6 m/s²	—	
Shock resistance	IEC 60068-2-27 (392 m/s² (40G), 3 times in each X, Y, or Z direction)					
Operating atmosphere	No greasy fumes, corrosive gas, flammable gas, excessive conductive dust, and direct sunlight (as well as at storage)					
Operating altitude *2	2000 m or less					
Installation location	Inside control panel					
Overvoltage category *3	II or less					
Pollution degree *4	2 or less					
Cooling method	Self-cooling					
Grounding	Grounding with a ground resistance of 100 Ω or less by using a ground cable that has a cross-sectional area of 2 mm² or more. If impossible, connect the ground cable to the control panel.					

Operate and store the GOT in environments without direct sunlight, high temperature, dust, humidity, and vibrations.

For the status of conforming to various standards and laws (CE, ATEX, UL/cUL, Class I Division 2, EAC, KC, KCs, and maritime certifications [ABS/BV/DNV GL/LR/NK/RINA]), please refer to the Mitsubishi Electric Factory Automation Global website (**www.MitsubishiElectric.com/fa/**).

*1 Includes the temperature inside the enclosure of the control panel to which the GOT is installed.

*2 Do not use or store the GOT under a pressure higher than the atmospheric pressure at altitude 0 m. Doing so may cause a malfunction. Air purging by applying pressure to the control panel may create clearance between the surface sheet and the touch panel. This may cause the touch panel to be not sensitive enough or the sheet to come off.

*3 This indicates the section of the power supply to which the equipment is assumed to be connected between the public electrical power distribution network and the machinery within the premises. Category II applies to equipment that is supplied with power from fixed facilities. The withstand surge voltage for the equipment with the rated voltage up to 300 V is 2500 V.

*4 This indicates the occurrence rate of conductive material in an environment where a device is used. Pollution degree 2 indicates an environment where only non-conductive pollution occurs normally and a temporary conductivity caused by condensation shall be expected depending on the conditions.

*5 Communication units and options usable with the rugged model can be used in the environment described in the general specifications of the rugged model. However, when a protective cover for oil is mounted on the GOT, the operating ambient temperature must be -20℃ to 50℃. For using peripheral devices to be connected to the GOT, please refer to the relevant product manual.

Performance specifications

Item		Specifications
		GT2507T-WTSD
Display section *1 *2	Display device	TFT color LCD
	Screen size	7" widescreen
	Resolution	WVGA: 800 × 480 dots
	Display size	152.40(6.00) (W) × 91.44(3.60) (H) mm (inch)
	Number of displayed characters	16-dot standard font: 50 characters × 30 lines (two-byte characters) 12-dot standard font: 66 characters × 40 lines (two-byte characters)
	Display color	65536 colors
	Brightness adjustment	32 levels
	Backlight	LED (not replaceable)
	Backlight life *4	Approx. 50000 h (operating ambient temperature: 25℃, display intensity: 50%)
Touch panel *3 *9	Type	Analog resistive film
	Key size	Minimum 2 × 2 dots *7 (per key)
	Simultaneous press	Not available *5 (Only 1 point can be touched.)
	Life	1 million touches or more (operating force: 0.98 N or less)
Panel color		Silver
User memory	User memory capacity	Memory for storage (ROM) *10: 32 MB Memory for operation (RAM): 128 MB
	Life (number of write times)	100000 times
Built-in clock precision		±90 seconds/month (ambient temperature: 25 ℃)
Battery		GT11-50BAT lithium battery
	Data to be backed up	SRAM data, clock data, system status log data
	Life	Approx. 5 years (ambient temperature: 25 ℃)
Built-in interface	RS-232	1 channel Transmission speed: 115200, 57600, 38400, 19200, 9600, 4800 bps Connector shape: D-sub 9-pin (male)
	RS-422/485	1 channel Transmission speed: 115200, 57600, 38400, 19200, 9600, 4800 bps Connector shape: D-sub 9-pin (female)
	Ethernet	2 channel Data transfer method: 100BASE-TX, 10BASE-T Connector shape: RJ-45 (modular jack)
	USB (host)	1 channel (rear face)
		USB version: USB 2.0 (High-Speed 480 Mbps), Connector shape: USB-A
	USB (device)	1 channel (rear face)
		USB version: USB 2.0 (High-Speed 480 Mbps), Connector shape: USB Mini-B
	SD memory card *10	1 channel, SDHC compliant (maximum 32 GB)
	Wireless LAN communication unit interface	For installing a wireless LAN communication unit
	Sound output interface	1 channel, WAV format (16 bits, 8.000 kHz/16.000 kHz, monoral) applicable plug: Φ3.5 stereo mini-plug (3-prong)
Buzzer output		Single tone (tone and tone length adjustable)
POWER LED		2 colors (blue and orange)
Protective structure *6		Front: IP66F *8, IP67F *8 Inside control panel: IP2X
Safety standards, radio laws (as of December 2019)		CE, UL, cUL, EAC, KC
External dimensions		214(8.43) (W) × 158(6.22) (H) × 55(2.17) (D) mm(inch)
Panel cut dimensions		197(7.76) (W) × 141(5.55) (H) mm(inch)
Weight (excluding a fitting)		1.2(2.6) kg(lb)
Compatible software package		GT Works3 Version1.225K or later

*1 As a characteristic of liquid crystal display panels, bright dots (always lit) and dark dots (never lit) may appear on the panel. Since liquid crystal display panels comprise a great number of display elements, the appearance of bright and dark dots cannot be reduced to zero. Individual differences in liquid crystal display panels may cause differences in color, uneven brightness and flickering. Note that these phenomena are characteristics of liquid crystal display panels and it does not mean the products are defective or damaged.

*2 Flickering may occur due to vibration, shock, or the display colors.

*3 When a stylus is used, the touch panel has a life of 100 thousand touches. The stylus must satisfy the following specifications.
• Material: polyacetal resin   • Tip radius: 0.8 mm or more

*4 To prevent the display section from burning in and lengthen the backlight life, enable the screen save function and turn off the backlight.

*5 If you touch two points or more simultaneously on the touch panel, a touch switch near the touched points may operate unexpectedly. Do not touch two points or more simultaneously on the touch panel.

*6 Note that the structure does not guarantee protection in all users' environments. The GOT may not be used in certain environments where it is subjected to splashing oil or chemicals for a long period of time or soaked in oil mist.

*7 The minimum size of a key that can be arranged. To ensure safe use of the product, the following settings are recommended.
• Key size: 16 × 16 dots or larger   • Distance between keys: 16 dots or more

*8 The suffix "F" of IP66F and IP67F is a symbol that indicates protection rate against oil. It is described in the Appendix of Japanese Industrial Standard JIS C 0920.

*9 Repeatedly touching the outer edge of the actual display area may cause the product to fail.

*10 While writing data to the memory for storage (ROM) or an SD memory card, if GOT is powered off, the data may be corrupted which may cause the GOT to stop operating.

Power supply specifications

Item		Specifications
		GT2507T-WTSD
Power supply voltage		24 V DC (+25%, -20%)
Power consumption	Under the maximum load	17 W or less
	Main unit	11 W
	Main unit (backlight OFF)	7 W
Inrush current		59 A or less (2 ms, ambient temperature: 25 °C, under the maximum load)
Permissible instantaneous power failure time		5 ms or less
Noise immunity		Noise voltage: 500 Vp-p, noise width: 1 µs, measured by a noise simulator with noise frequency ranging from 25 Hz to 60 Hz
Withstand voltage		350 V AC for 1 minute across power terminals and earth
Insulation resistance		500 V DC across power terminals and earth, 10 MΩ or more by an insulation resistance tester

Specifications

GT23 model

General specifications

Item	Specifications				
Operating ambient temperature *1	0 °C to 55 °C *6				
Storage ambient temperature	−20 °C to 60 °C				
Operating ambient humidity	10% RH to 90% RH, non-condensing *2				
Storage ambient humidity	10% RH to 90% RH, non-condensing *2				
Vibration resistance	Compliant with JIS B 3502 and IEC 61131-2		Frequency	Acceleration	Half amplitude	Sweep count
		Under intermittent vibration	5 to 8.4 Hz	—	3.5 mm	10 times in each X, Y, or Z direction
			8.4 to 150 Hz	9.8 m/s2	—	
		Under continuous vibration	5 to 8.4 Hz	—	1.75 mm	—
			8.4 to 150 Hz	4.9 m/s2	—	
Shock resistance	Compliant with JIS B 3502 and IEC 61131-2 (147 m/s2 (15G), 3 times in each X, Y, or Z direction)				
Operating atmosphere	No greasy fumes, corrosive gas, flammable gas, excessive conductive dust, and direct sunlight (as well as at storage)				
Operating altitude *3	2000 m or less				
Installation location	Inside control panel				
Overvoltage category *4	II or less				
Pollution degree *5	2 or less				
Cooling method	Self-cooling				
Grounding	Grounding with a ground resistance of 100 Ω or less by using a ground cable that has a cross-sectional area of 2 mm2 or more. If impossible, connect the ground cable to the control panel.				

Operate and store the GOT in environments without direct sunlight, high temperature, dust, humidity, and vibrations.

For the status of conforming to various standards and laws (CE, ATEX, UL/cUL, Class I Division 2, EAC, KC, KCs, and maritime certifications [ABS/BV/DNV GL/LR/NK/RINA]), please refer to the Mitsubishi Electric Factory Automation Global website (**www.MitsubishiElectric.com/fa/**).

*1 Includes the temperature inside the enclosure of the control panel to which the GOT is installed.

*2 If the ambient temperature exceeds 40 °C, the absolute humidity must not exceed 90% RH at 40 °C.

*3 Do not use or store the GOT under a pressure higher than the atmospheric pressure at altitude 0 m. Doing so may cause a malfunction. Air purging by applying pressure to the control panel may create clearance between the surface sheet and the touch panel. This may cause the touch panel to be not sensitive enough or the sheet to come off.

*4 This indicates the section of the power supply to which the equipment is assumed to be connected between the public electrical power distribution network and the machinery within the premises. Category II applies to equipment that is supplied with power from fixed facilities. The withstand surge voltage for the equipment with the rated voltage up to 300 V is 2500 V.

*5 This indicates the occurrence rate of conductive material in an environment where a device is used. Pollution degree 2 indicates an environment where only non-conductive pollution occurs normally and a temporary conductivity caused by condensation shall be expected depending on the conditions.

*6 When a protective cover for oil is mounted on the GOT, the maximum operating ambient temperature must be 5°C lower than the one described in the general specifications.

Performance specifications

Item		Specifications	
		GT2310-VTBA GT2310-VTBD	GT2308-VTBA GT2308-VTBD
Display section *1 *2	Display device	TFT color LCD	
	Screen size	10.4"	8.4"
	Resolution	VGA: 640 × 480 dots	
	Display size	211.2(8.31) (W) × 158.4(6.24) (H) mm(inch)	170.9(6.73) (W) × 128.2(5.05) (H) mm(inch)
	Number of displayed characters	16-dot standard font: 40 characters × 30 lines (two-byte characters) 12-dot standard font: 53 characters × 40 lines (two-byte characters)	
	Display color	65536 colors	
	Brightness adjustment	16 levels	
	Backlight	LED (not replaceable)	
	Backlight life *4	Approx. 50000 h (operating ambient temperature: 25 °C, display intensity: 50%)	
Touch panel *3 *9	Type	Analog resistive film	
	Key size	Minimum 2 × 2 dots *7 (per key)	
	Simultaneous press	Not available *5 (Only 1 point can be touched.)	
	Life	1 million touches or more (operating force: 0.98 N or less)	
Panel color		Black	
User memory	User memory capacity	Memory for storage (ROM) *10: 9 MB Memory for operation (RAM): 9 MB	
	Life (number of write times)	100000 times	
Built-in clock precision		±90 seconds/month (ambient temperature: 25 °C)	
Battery		GT11-50BAT lithium battery (option)	
	Data to be backed up	SRAM data, clock data, system status log data	
	Life	Approx. 5 years (ambient temperature: 25 °C)	
Built-in interface	RS-232	1 channel Transmission speed: 115200, 57600, 38400, 19200, 9600, 4800 bps Connector shape: D-sub 9-pin (male)	
	RS-422/485	1 channel Transmission speed: 115200, 57600, 38400, 19200, 9600, 4800 bps Connector shape: D-sub 9-pin (female)	
	Ethernet	1 channel Data transfer method: 100BASE-TX, 10BASE-T Connector shape: RJ-45 (modular jack)	
	USB (host)	1 channel (rear face)	
		USB version: USB 1.1 (Full-Speed 12 Mbps), Connector shape: USB-A	
	USB (device)	1 channel (rear face)	
		USB version: USB 1.1 (Full-Speed 12 Mbps), Connector shape: USB Mini-B	
	SD memory card *10	1 channel, SDHC compliant (maximum 32 GB)	
Buzzer output		Single tone (tone length adjustable)	
POWER LED		2 colors (blue and orange)	
Protective structure *6		Front: IP67F *8 Inside control panel: IP2X	
Safety standards, radio laws (as of December 2019)		CE, UL, cUL, EAC, KC	
External dimensions		303(11.93) (W) × 218(8.58) (H) × 56(2.20) (D) mm(inch)	241(9.49) (W) × 194(7.64) (H) × 56(2.20) (D) mm(inch)
Panel cut dimensions		289(11.38) (W) × 200(7.87) (H) mm(inch)	227(8.94) (W) × 176(6.93) (H) mm(inch)
Weight (excluding a fitting)		1.9(4.2) kg(lb)	1.5(3.3) kg(lb)
Compatible software package		GT Works3 Version1.225K or later	

*1 As a characteristic of liquid crystal display panels, bright dots (always lit) and dark dots (never lit) may appear on the panel. Since liquid crystal display panels comprise a great number of display elements, the appearance of bright and dark dots cannot be reduced to zero. Individual differences in liquid crystal display panels may cause differences in color, uneven brightness and flickering. Note that these phenomena are characteristics of liquid crystal display panels and it does not mean the products are defective or damaged.

*2 Flickering may occur due to vibration, shock, or the display colors.

*3 When a stylus is used, the touch panel has a life of 100 thousand touches. The stylus must satisfy the following specifications.
• Material: polyacetal resin   • Tip radius: 0.8 mm or more

*4 To prevent the display section from burning in and lengthen the backlight life, enable the screen save function and turn off the backlight.

*5 If you touch two points or more simultaneously on the touch panel, a touch switch near the touched points may operate unexpectedly. Do not touch two points or more simultaneously on the touch panel.

*6 Note that the structure does not guarantee protection in all users' environments. The GOT may not be used in certain environments where it is subjected to splashing oil or chemicals for a long period of time or soaked in oil mist.

*7 The minimum size of a key that can be arranged. To ensure safe use of the product, the following settings are recommended.
• Key size: 16 × 16 dots or larger   • Distance between keys: 16 dots or more

*8 The suffix "F" of IP67F is a symbol that indicates protection rate against oil. It is described in the Appendix of Japanese Industrial Standard JIS C 0920.

*9 Repeatedly touching the outer edge of the actual display area may cause the product to fail.

*10 While writing data to the memory for storage (ROM) or an SD memory card, if GOT is powered off, the data may be corrupted which may cause the GOT to stop operating.

Power supply specifications

Item		Specifications			
		GT2310-VTBA	GT2308-VTBA	GT2310-VTBD	GT2308-VTBD
Power supply voltage		100 V AC to 240 V AC (+10%, −15%)		24 V DC (+25%, −20%)	
Power supply frequency		50 Hz/60 Hz (±5%)		—	
Power consumption	Under the maximum load	18 W or less	11 W or less	16 W or less	11 W or less
	Main unit	15 W	9 W	13 W	8 W
	Main unit (backlight OFF)	8 W	6 W	7 W	6 W
Inrush current		40 A or less (4 ms, ambient temperature: 25 °C, under the maximum load)		40 A or less (2 ms, ambient temperature: 25 °C, under the maximum load)	
Permissible instantaneous power failure time		20 ms or less (100 V AC or more)		10 ms or less	
Noise immunity		Noise voltage: 1500 Vp-p, noise width: 1 μs, measured by a noise simulator with noise frequency ranging from 25 Hz to 60 Hz		Noise voltage: 500 Vp-p, noise width: 1 μs, measured by a noise simulator with noise frequency ranging from 25 Hz to 60 Hz	
Withstand voltage		1500 V AC for 1 minute across power terminals and earth		350 V AC for 1 minute across power terminals and earth	
Insulation resistance		500 V DC across power terminals and earth, 10 MΩ or more by an insulation resistance tester			

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Specifications

Specifications

GT21 wide model/GT21 model

General specifications

Item	Specifications				
Operating ambient temperature [1]	0 °C to 55 °C [7] (horizontal installation), 0 °C to 50 °C (vertical installation)				
Storage ambient temperature	−20 °C to 60 °C				
Operating ambient humidity	10% RH to 90% RH, non-condensing [2]				
Storage ambient humidity	10% RH to 90% RH, non-condensing [2]				
Vibration resistance	Compliant with JIS B 3502 and IEC 61131-2		Frequency	Acceleration	Half amplitude	Sweep count
		Under intermittent vibration	5 to 8.4 Hz	—	3.5 mm	10 times in each X, Y, or Z direction
			8.4 to 150 Hz	9.8 m/s²	—	
		Under continuous vibration	5 to 8.4 Hz	—	1.75 mm	—
			8.4 to 150 Hz	4.9 m/s²	—	
Shock resistance	Compliant with JIS B 3502 and IEC 61131-2 (147 m/s² (15G), 3 times in each X, Y, or Z direction)				
Operating atmosphere	No greasy fumes, corrosive gas, flammable gas, excessive conductive dust, and direct sunlight (as well as at storage)				
Operating altitude [3]	2000 m or less				
Installation location	Inside control panel				
Overvoltage category [4]	II or less				
Pollution degree [5]	2 or less				
Cooling method	Self-cooling				
Grounding	GT2107-W: Grounding with a ground resistance of 100 Ω or less by using a ground cable that has a cross-sectional area of 2 mm² or more. If impossible, connect the ground cable to the control panel. GT2104, GT2103: Grounding with a ground resistance of 100 Ω or less by using a ground cable that has a cross-sectional area of 0.14 to 1.5 mm² (single wire), 0.14 to 1.0 mm² (stranded wire), or 0.25 to 0.5 mm² (rod terminal with an insulation sleeve). If impossible, connect the ground cable to the control panel.[6]				

Operate and store the GOT in environments without direct sunlight, high temperature, dust, humidity, and vibrations.

For the status of conforming to various standards and laws (CE, ATEX, UL/cUL, Class I Division 2, EAC, KC, KCs, and maritime certifications [ABS/BV/DNV GL/LR/NK/RINA]), please refer to the Mitsubishi Electric Factory Automation Global website (**www.MitsubishiElectric.com/fa/**).

[1] Includes the temperature inside the enclosure of the control panel to which the GOT is installed.
[2] If the ambient temperature exceeds 40 °C, the absolute humidity must not exceed 90% RH at 40 °C.
[3] Do not use or store the GOT under a pressure higher than the atmospheric pressure at altitude 0 m. Doing so may cause a malfunction. Air purging by applying pressure to the control panel may create clearance between the surface sheet and the touch panel. This may cause the touch panel to be not sensitive enough or the sheet to come off.
[4] This indicates the section of the power supply to which the equipment is assumed to be connected between the public electrical power distribution network and the machinery within the premises. Category II applies to equipment that is supplied with power from fixed facilities. The withstand surge voltage for the equipment with the rated voltage up to 300 V is 2500 V.
[5] This indicates the occurrence rate of conductive material in an environment where a device is used. Pollution degree 2 indicates an environment where only non-conductive pollution occurs normally and a temporary conductivity caused by condensation shall be expected depending on the conditions.
[6] 5 V DC type does not require grounding.
[7] When a protective cover for oil is mounted on the GOT, the maximum operating ambient temperature must be 5°C lower than the one described in the general specifications.

Performance specifications

Item		Specifications	
		GT21 wide model	
		GT2107-WTBD	GT2107-WTSD
Display section [1] [2]	Display device	TFT color LCD	
	Screen size	7" widescreen	
	Resolution	WVGA: 800 × 480 dots	
	Display size	152.40(6.00) (W) × 91.44(3.60) (H) mm (inch)	
	Number of displayed characters	16-dot standard font: 50 characters × 30 lines (two-byte characters) 12-dot standard font: 66 characters × 40 lines (two-byte characters)	
	Display color	65536 colors	
	Brightness adjustment	32 levels	
	Backlight	LED (not replaceable)	
	Backlight life [4]	Approx. 50000 h (operating ambient temperature: 25 °C, display intensity: 50%)	
Touch panel [3] [11]	Type	Analog resistive film	
	Key size	Minimum 2 × 2 dots [9] (per key)	
	Simultaneous press	Not available [5] (Only 1 point can be touched.)	
	Life	1 million touches or more (operating force: 0.98 N or less)	
Panel color		Black	Silver [15]
User memory	User memory capacity	Memory for storage (ROM) [12]: 15 MB	
	Life (number of write times)	100000 times	
Built-in clock precision		±45 seconds/month (ambient temperature: 25 °C)	
Battery		GT11-50BAT lithium battery	
	Data to be backed up	SRAM data, clock data	
	Life	Approx. 5 years (ambient temperature: 25 °C)	
Built-in interface	RS-232	1 channel Transmission speed: 115200, 57600, 38400, 19200, 9600, 4800 bps Connector shape: D-sub 9-pin (male)	
	RS-422/485	1 channel Transmission speed: 115200, 57600, 38400, 19200, 9600, 4800 bps Connector shape: D-sub 9-pin (female)	
	RS-422	—	
	Ethernet	1 channel Data transfer method: 100BASE-TX, 10BASE-T Connector shape: RJ-45 (modular jack)	
	USB (host)	1 channel (rear face)	
		USB version: USB 1.1 (Full-Speed 12 Mbps), Connector shape: USB-A	
	USB (device)	1 channel (front face)	
		USB version: USB 1.1 (Full-Speed 12 Mbps), Connector shape: USB Mini-B	
	SD memory card [12]	1 channel, SDHC compliant (maximum 32 GB)	
Buzzer output		Single tone (tone length adjustable)	
Protective structure [7]		Front: IP67F [10] [14] Inside control panel: IP2X	
Safety standards, radio laws (as of December 2019)		CE, UL, cUL, EAC, KC	
External dimensions		189(7.44) (W) × 142(5.59) (H) × 48(1.89) (D) mm(inch)	
Panel cut dimensions		180.5(7.11) (W) × 133.5(5.26) (H) mm(inch)	
Weight (excluding a fitting)		0.7(1.54) kg(lb)	
Compatible software package		GT Works3 Version1.225K or later	

[1] As a characteristic of liquid crystal display panels, bright dots (always lit) and dark dots (never lit) may appear on the panel. Since liquid crystal display panels comprise a great number of display elements, the appearance of bright and dark dots cannot be reduced to zero. Individual differences in liquid crystal display panels may cause differences in color, uneven brightness and flickering. Note that these phenomena are characteristics of liquid crystal display panels and it does not mean the products are defective or damaged.
[2] Flickering may occur due to vibration, shock, or the display colors.
[3] When a stylus is used, the touch panel has a life of 100 thousand touches. The stylus must satisfy the following specifications.
  • Material: polyacetal resin • Tip radius: 0.8 mm or more
[4] To prevent the display section from burning in and lengthen the backlight life, enable the screen save function and turn off the backlight.
[5] If you touch two points or more simultaneously on the touch panel, a touch switch near the touched points may operate unexpectedly. Do not touch two points or more simultaneously on the touch panel.
[6] The SD memory card unit (GT21-03SDCD), sold separately, needs to be mounted.
[7] Note that the structure does not guarantee protection in all users' environments. The GOT may not be used in certain environments where it is subjected to splashing oil or chemicals for a long period of time or soaked in oil mist.
[8] The dimension when the SD memory card unit (GT21-03SDCD) is mounted is 113(4.45) (W) × 74(2.91) (H) × 32(1.26) (D) mm(inch).
[9] The minimum size of a key that can be arranged. To ensure safe use of the product, the following settings are recommended.
  • Key size: 16 × 16 dots or larger • Distance between keys: 16 dots or more (GT2107-WTBD, GT2107-WTSD)
[10] The suffix "F" of IP67F is a symbol that indicates protection rate against oil. It is described in the Appendix of Japanese Industrial Standard JIS C 0920.
[11] Repeatedly touching the outer edge of the actual display area may cause the product to fail.

Power supply specifications

Item		GT21 wide model	GT21 model				
		GT2107-WTBD GT2107-WTSD	GT2104-RTBD	GT2103-PMBD	GT2103-PMBDS	GT2103-PMBDS2	GT2103-PMBLS
Power supply voltage		24 V DC (+10%, −15%)					5 V DC (+5%, −5%) Power from the PLC
Power supply frequency		—					
Power consumption	Under the maximum load	11.3 W or less	4.4 W or less	2.6 W or less	1.9 W or less	2.2 W or less	1.1 W or less
	Main unit (backlight OFF)	7.0 W	2.9 W	2.0 W	1.3 W	1.6 W	0.7 W
Inrush current		35 A or less (3 ms, ambient temperature: 25 °C, under the maximum load)	18 A or less (2 ms, ambient temperature: 25 °C, under the maximum load)	30 A or less (1 ms, ambient temperature: 25 °C, under the maximum load)			—
Permissible instantaneous power failure time		5 ms or less					—
Noise immunity		Noise voltage: 1000 Vp-p, noise width: 1 μs, measured by a noise simulator with noise frequency ranging from 30 Hz to 100 Hz					
Withstand voltage		500 V AC for 1 minute across power terminals and earth					—
Insulation resistance		500 V DC across power terminals and earth, 10 MΩ or more by an insulation resistance tester					—

Item		Specifications GT21 model				
		GT2104-RTBD	GT2103-PMBD	GT2103-PMBDS	GT2103-PMBDS2	GT2103-PMBLS
Display section *1 *2	Display device	TFT color LCD	TFT monochrome LCD			
	Screen size	4.3"	3.8"			
	Resolution	480 × 272 dots	320 × 128 dots			
	Display size	95.0(3.74) (W) × 53.8(2.12) (H) mm(inch)	89.0(3.50) (W) × 35.6(1.40) (H) mm(inch)			
	Number of displayed characters	16-dot standard font: 30 characters × 17 lines (two-byte characters) 12-dot standard font: 40 characters × 22 lines (two-byte characters)	16-dot standard font: 20 characters × 8 lines (two-byte characters) 12-dot standard font: 26 characters × 10 lines (two-byte characters)			
	Display color	65536 colors	Monochrome (black/white) 32 shade grayscale			
	Brightness adjustment	32 levels				
	Backlight	LED (not replaceable)	5-color LED (white, green, pink, orange, red) (not replaceable)			
	Backlight life *4	Approx. 50000 h (operating ambient temperature: 25 °C, display intensity: 50%)				
Touch panel *3 *11	Type	Analog resistive film				
	Key size	Minimum 2 × 2 dots *9 (per key)				
	Simultaneous press	Not available *5 (Only 1 point can be touched.)				
	Life	1 million touches or more (operating force: 0.98 N or less)				
Panel color		Black				
User memory	User memory capacity	Memory for storage (ROM) *12: 9 MB	Memory for storage (ROM) *12: 3 MB			
	Life (number of write times)	100000 times				
Built-in clock precision		±45 seconds/month (ambient temperature: 25 °C)	—			
Battery		GT11-50BAT lithium battery	—			
	Data to be backed up	SRAM data, clock data	—			
	Life	Approx. 5 years (ambient temperature: 25 °C)	—			
Built-in interface	RS-232	1 channel Transmission speed: 115200, 57600, 38400, 19200, 9600, 4800 bps Connector shape: 9-pin connector terminal block	—	1 channel Transmission speed: 115200, 57600, 38400, 19200, 9600, 4800 bps Connector shape: MINI-DIN 6-pin (female)	2 channels Transmission speed: 115200, 57600, 38400, 19200, 9600, 4800 bps Connector shape: 9-pin connector terminal block, MINI-DIN 6-pin (female)	—
	RS-422/485	1 channel Transmission speed: 115200, 57600, 38400, 19200, 9600, 4800 bps Connector shape: 9-pin connector terminal block	1 channel Transmission speed: 115200, 57600, 38400, 19200, 9600, 4800 bps Connector shape: 5-pin connector terminal block	1 channel Transmission speed: 115200, 57600, 38400, 19200, 9600, 4800 bps Connector shape: 9-pin connector terminal block	—	
	RS-422	—				1 channel Transmission speed: 115200, 57600, 38400, 19200, 9600, 4800 bps Connector shape: 9-pin connector terminal block *13
	Ethernet	1 channel Data transfer method: 100BASE-TX, 10BASE-T Connector shape: RJ-45 (modular jack)	—			
	USB (device)	1 channel (rear face)				
		USB version: USB 1.1 (Full-Speed 12 Mbps), Connector shape: USB Mini-B				
	SD memory card *12	1 channel, SDHC compliant (maximum 32 GB)	1 channel, SDHC compliant (maximum 32 GB) *6			—
Buzzer output		Single tone (tone length adjustable)				
Protective structure *7		Front: IP67F *10 Inside control panel: IP2X				
Safety standards, radio laws (as of December 2019)		CE, UL, cUL, EAC, KC				
External dimensions		128(5.04) (W) × 102(4.02) (H) × 40(1.57) (D) mm(inch)	113(4.45) (W) × 74(2.91) (H) × 32(1.26) (D) mm(inch)	113(4.45) (W) × 74(2.91) (H) × 27(1.06) (D) mm(inch) *8		113(4.45) (W) × 74(2.91) (H) × 27(1.06) (D) mm(inch)
Panel cut dimensions		118(4.65) (W) × 92(3.62) (H) mm(inch)	105(4.13) (W) × 66(2.60) (H) mm(inch)			
Weight (excluding a fitting)		0.4(0.88) kg(lb)	0.2(0.44) kg(lb)			0.18(0.40) kg(lb)
Compatible software package		GT Works3 Version1.225K or later				

*12 While writing data to the memory for storage (ROM) or an SD memory card, if GOT is powered off, the data may be corrupted which may cause the GOT to stop operating.

*13 Use a 3 m or shorter cable.

*14 To conform to IP67F, close the USB environmental protection cover by pushing the [PULL] mark firmly. (The GOT conforms to IP2X when the USB environmental protection cover is open.)

*15 The lower part of the panel including the USB environmental protection cover is black.

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Specifications

Specifications

GS21 model

General specifications

Item	Specifications				
Operating ambient temperature [1]	0 ℃ to 50 ℃				
Storage ambient temperature	−20 ℃ to 60 ℃				
Operating ambient humidity	10% RH to 90% RH, non-condensing [2]				
Storage ambient humidity	10% RH to 90% RH, non-condensing [2]				
Vibration resistance	Compliant with IEC 61131-2		Frequency	Acceleration	Half amplitude	Sweep count
		Under intermittent vibration	5 to 8.4 Hz	—	3.5 mm	10 times in each X, Y, or Z direction
			8.4 to 150 Hz	9.8 m/s^2	—	
		Under continuous vibration	5 to 8.4 Hz	—	1.75 mm	—
			8.4 to 150 Hz	4.9 m/s^2	—	
Shock resistance	Compliant with IEC 61131-2 (147 m/s^2 (15G), 3 times in each X, Y, or Z direction)				
Operating atmosphere	No greasy fumes, corrosive gas, flammable gas, excessive conductive dust, and direct sunlight (as well as at storage)				
Operating altitude [3]	2000 m or less				
Installation location	Inside control panel				
Overvoltage category [4]	II or less				
Pollution degree [5]	2 or less				
Cooling method	Self-cooling				
Grounding	Grounding with a ground resistance of 100 Ω or less by using a ground cable that has a cross-sectional area of 2 mm^2 or more. If impossible, connect the ground cable to the control panel.				

Operate and store the GOT in environments without direct sunlight, high temperature, dust, humidity, and vibrations.

For the status of conforming to various standards and laws (CE, ATEX, UL/cUL, Class I Division 2, EAC, KC, KCs, and maritime certifications [ABS/BV/DNV GL/LR/NK/RINA]), please refer to the Mitsubishi Electric Factory Automation Global website (**www.MitsubishiElectric.com/fa/**).

[1] Includes the temperature inside the enclosure of the control panel to which the GOT is installed.

[2] If the ambient temperature exceeds 40 °C, the absolute humidity must not exceed 90% RH at 40 °C.

[3] Do not use or store the GOT under a pressure higher than the atmospheric pressure at altitude 0 m. Doing so may cause a malfunction. Air purging by applying pressure to the control panel may create clearance between the surface sheet and the touch panel. This may cause the touch panel to be not sensitive enough or the sheet to come off.

[4] This indicates the section of the power supply to which the equipment is assumed to be connected between the public electrical power distribution network and the machinery within the premises. Category II applies to equipment that is supplied with power from fixed facilities. The withstand surge voltage for the equipment with the rated voltage up to 300 V is 2500 V.

[5] This indicates the occurrence rate of conductive material in an environment where a device is used. Pollution degree 2 indicates an environment where only non-conductive pollution occurs normally and a temporary conductivity caused by condensation shall be expected depending on the conditions.

Performance specifications

Item		Specifications	
		GS2110-WTBD	GS2107-WTBD
Display section [1] [2]	Display device	TFT color LCD	
	Screen size	10" widescreen	7" widescreen
	Resolution	WVGA: 800 × 480 dots	
	Display size	W222(8.74) × H132.5(5.22) [mm] (inch)	W154(6.06) × H85.9(3.38) [mm] (inch)
	Number of displayed characters	16-dot standard font: 50 characters × 30 lines (two-byte characters) 12-dot standard font: 66 characters × 40 lines (two-byte characters)	
	Display color	65536 colors	
	Brightness adjustment	32 levels	
	Backlight [4]	LED (not replaceable)	
Touch panel [3] [9]	Type	Analog resistive film	
	Key size	Minimum 2 × 2 dots [7] (per key)	
	Simultaneous press	Not available [5] (Only 1 point can be touched.)	
	Life	1 million touches or more (operating force: 0.98 N or less)	
Panel color		Black	
User memory	User memory capacity	Flash memory (Internal): 9 MB	
	Life (number of write times)	100000 times	
Built-in interface	RS-232	1 channel Transmission speed: 115200, 57600, 38400, 19200, 9600, 4800 bps Connector shape: D-sub 9-pin (male)	
	RS-422	1 channel Transmission speed: 115200, 57600, 38400, 19200, 9600, 4800 bps Connector shape: D-sub 9-pin (female) Terminating resistor: 330 Ω fixed	
	Ethernet	1 channel Data transfer method: 100BASE-TX, 10BASE-T Connector shape: RJ-45 (modular jack)	
	USB (device)	1 channel (rear face)	
		USB version: USB 1.1 (Full-Speed 12 Mbps), Connector shape: USB Mini-B	
	SD memory card [10]	1 channel, SDHC compliant (maximum 32 GB)	
Buzzer output		Single tone (tone length adjustable)	
Protective structure [6]		Front: IP65F [8]	
Safety standards, radio laws (as of December 2019)		CE, UL, cUL, EAC, KC	
External dimensions		272(10.71) (W) × 214(8.43) (H) × 56(2.21) (D) mm(inch)	206(8.11) (W) × 155(6.11) (H) × 50(1.97) (D) mm(inch)
Panel cut dimensions		258(10.16) (W) × 200(7.88) (H) mm(inch)	191(7.52) (W) × 137(5.40) (H) mm(inch)
Weight (excluding a fitting)		1.3(2.9) kg(lb)	0.9(2.0) kg(lb)
Compatible software package		GT Works3 Version1.225K or later [11]	

[1] As a characteristic of liquid crystal display panels, bright dots (always lit) and dark dots (never lit) may appear on the panel. Since liquid crystal display panels comprise a great number of display elements, the appearance of bright and dark dots cannot be reduced to zero. Individual differences in liquid crystal display panels may cause differences in color, uneven brightness and flickering. Note that these phenomena are characteristics of liquid crystal display panels and it does not mean the products are defective or damaged.

[2] Flickering may occur due to vibration, shock, or the display colors.

[3] When a stylus is used, the touch panel has a life of 100 thousand touches. The stylus must satisfy the following specifications.
• Material: polyacetal resin   • Tip radius: 0.8 mm or more

[4] To prevent the display section from burning in and lengthen the backlight life, enable the screen save function and turn off the backlight.

[5] If you touch two points or more simultaneously on the touch panel, a touch switch near the touched points may operate unexpectedly. Do not touch two points or more simultaneously on the touch panel.

[6] Note that the structure does not guarantee protection in all users' environments. The GOT may not be used in certain environments where it is subjected to splashing oil or chemicals for a long period of time or soaked in oil mist.

[7] The minimum size of a key that can be arranged. To ensure safe use of the product, the following settings are recommended.
• Key size: 16 × 16 dots or larger   • Distance between keys: 16 dots or more

[8] The suffix "F" of IP65F is a symbol that indicates protection rate against oil. It is described in the Appendix of Japanese Industrial Standard JIS C 0920.

[9] Repeatedly touching the outer edge of the actual display area may cause the product to fail.

[10] While writing data to the memory for storage (ROM) or an SD memory card, if GOT is powered off, the data may be corrupted which may cause the GOT to stop operating.

[11] When the software is earlier than GT Works3 Version1.215Z, installation of the GS installer is required.

Power supply specifications

Item		Specifications	
		GS2110-WTBD	GS2107-WTBD
Power supply voltage		24 V DC (+10%, -15%), ripple voltage 200 mV or less	
Power consumption	Under the maximum load	7.6 W (317 mA/24 V) or less	6.5 W (271 mA/24 V) or less
	Main unit (backlight OFF)	3.8 W (158 mA/24 V) or less	3.8 W (158 mA/24 V) or less
Inrush current		17 A or less (6 ms, ambient temperature 25°C, under the maximum load)	
Permissible instantaneous power failure time		Within 5 ms	
Noise immunity		Conforms to IEC61000-4-4, 2 kV (power supply line)	
Withstand voltage		350 V AC for 1 minute across power terminals and earth	
Insulation resistance		500 V DC across power terminals and earth, 10 MΩ or more by an insulation resistance tester	

Specifications

External dimensions

Unit: mm (inch)

GT2715

GT2712/GT2512

* Human sensor is on GT2712 only.

GT2710/GT2510-V

GT2708/GT2508

GT2705

GT2505

Panel cut dimensions

Unit: mm (inch)

Screen size	Model	A	B	Remarks
15"	GT2715	383.5 (15.10)	282.5 (11.12)	Same dimensions as GT1695, GT1595.
12.1"	GT2712 GT2512	302 (11.89)	228 (8.98)	Same dimensions as GT1685, GT1585, A985GOT.
10.4"	GT2710 GT2510-V	289 (11.38)	200 (7.87)	Same dimensions as GT167□, GT157□, GT1275, A97□GOT.
8.4"	GT2708 GT2508	227 (8.94)	176 (6.93)	Same dimensions as GT166□, GT156□, GT1265.
5.7"	GT2705 GT2505	153 (6.02)	121 (4.76)	Same dimensions as GT1655, GT155□, GT145□, GT115□, GT105□, F940GOT.

A $^{+2}_{0}$ (0.08) (0)

Panel opening

B $^{+2}_{0}$ (0.08) (0)

* Panel thickness: 1.6 mm to 4 mm (0.06 inch to 0.16 inch)

GT25 open frame model

External dimensions

Unit: mm (inch)

GT2512F

54 (2.13)
227 (8.94)
347 (13.66)
311 (12.24)
273 (10.75)
237 (9.33)
301 (11.85)

GT2510F

54 (2.13)
199 (7.83)
334 (13.15)
298 (11.73)
245 (9.65)
209 (8.23)
288 (11.34)

GT2508F

54 (2.13)
175 (6.89)
272 (10.71)
236 (9.29)
221 (8.70)
185 (7.28)
226 (8.90)

* Install the fittings on the top and bottom, or the right and left of the GOT.

Panel cut dimensions/Measurements based on the screen center

Unit: mm (inch)

Screen size	Model	Panel cutting dimensions		Measurements based on the screen center			
		X	Y	X1	X2	Y1	Y2
12.1"	GT2512F	214(8.43)(+2(0.08), 0(0))	269(10.59)(+2(0.08), 0(0))	103(4.06)(+2(0.08), 0(0))	(111(4.37))	134.5(5.30)(+1(0.04), 0(0))	(134.5(5.30))
10.4"	GT2510F	187(7.36)(+2(0.08), 0(0))	234(9.21)(+2(0.08), 0(0))	89.5(3.52)(+1(0.04), 0(0))	(97.5(3.84))	117(4.61)(+1(0.04), 0(0))	(117(4.61))
8.4"	GT2508F	158(6.22)(+2(0.08), 0(0))	194(7.64)(+2(0.08), 0(0))	75.25(2.96)(+1(0.04), 0(0))	(82.75(3.26))	97.5(3.84)(+1(0.04), 0(0))	(96.5(3.80))

Screen size	Model	Distance between studs *				
		A1	A2	A3	B1	B2
12.1"	GT2512F	98(3.86)±0.15(0.01)	113(4.45)±0.15(0.01)	7.5(0.30)±0.15(0.01)	75.5(2.97)±0.15(0.01)	79.5(3.13)±0.15(0.01)
10.4"	GT2510F	105.5(4.15)±0.15(0.01)	105.5(4.15)±0.15(0.01)	0(0)	58(2.28)±0.15(0.01)	58(2.28)±0.15(0.01)
8.4"	GT2508F	64.5(2.54)±0.15(0.01)	74.5(2.93)±0.15(0.01)	—	58(2.28)±0.15(0.01)	58(2.28)±0.15(0.01)

Screen size	Model	Distance between studs *				
		C1	C2	C3	C4	C5
12.1"	GT2512F	98(3.86)±0.15(0.01)	113(4.45)±0.15(0.01)	7.5(0.30)±0.15(0.01)	160(6.30)±0.15(0.01)	175(6.89)±0.15(0.01)
10.4"	GT2510F	105.5(4.15)±0.15(0.01)	105.5(4.15)±0.15(0.01)	0(0)	161(6.34)±0.15(0.01)	161(6.34)±0.15(0.01)
8.4"	GT2508F	64.5(2.54)±0.15(0.01)	74.5(2.93)±0.15(0.01)	—	126(4.96)±0.15(0.01)	134(5.28)±0.15(0.01)

Screen size	Model	Distance between studs *			
		D1	D2	D3	D4
12.1"	GT2512F	128.5(5.06)±0.15(0.01)	132.5(5.22)±0.15(0.01)	75.5(2.97)±0.15(0.01)	79.5(3.13)±0.15(0.01)
10.4"	GT2510F	114.5(4.51)±0.15(0.01)	118.5(4.67)±0.15(0.01)	58(2.28)±0.15(0.01)	58(2.28)±0.15(0.01)
8.4"	GT2508F	104.5(4.11)±0.15(0.01)	104.5(4.11)±0.15(0.01)	58(2.28)±0.15(0.01)	58(2.28)±0.15(0.01)

· Horizontal

Back of the control panel

· Vertical

Back of the control panel

* Panel thickness: 1.5 mm to 4 mm
(0.06 inch to 0.16 inch)

* To mount the GOT on the control panel, studs are necessary. Align the studs with the installation holes of the fittings, and install the studs.
  The fittings must be installed on the top and bottom, or the right and left of the GOT. For GT2512F, you are recommended to install the fittings on the long sides of the GOT.

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Specifications

Specifications

GT25 wide model

External dimensions

Unit: mm (inch)

GT2510-WX	GT2507-W

GT2510-WX dimensions: 10 (0.39), 185 (7.28), 10 (0.39), 252 (9.92), 203 (7.99), 24.5 (0.96), 194 (7.64), 203 (7.99), 24.5 (0.96), 6 (0.24), 48 (1.89), 243 (9.57)

GT2507-W dimensions: 10 (0.39), 133 (5.24), 10 (0.39), 189 (7.44), 145 (5.71), 22 (0.87), 142 (5.59), 142 (5.59), 23.5 (0.93), 6 (0.24), 48 (1.89), 180 (7.09)

Panel cut dimensions

Unit: mm (inch)

Screen size	Model	A	B	Remarks
10.1" widescreen	GT2510-WX	243.5 (9.59)	185.5 (7.30)	—
7" widescreen	GT2507-W	180.5 (7.11)	133.5 (5.26)	—

$A \begin{smallmatrix} +1 (0.04) \\ 0 (0) \end{smallmatrix}$

$B \begin{smallmatrix} +1 (0.04) \\ 0 (0) \end{smallmatrix}$

Panel opening

* Panel thickness: 1.6 mm to 4 mm
  (0.06 inch to 0.16 inch)

GT25 handy GOT

External dimensions

Unit: mm (inch)

GT2506HS	GT2505HS

GT2506HS dimensions: 201 (7.91), 21 (0.83), 50 (1.97), 47 (1.85), 230 (9.06)

GT2505HS dimensions: 145 (5.71), 20.5 (0.81), 33.8 (1.33), 45.5 (1.79), 185 (7.28)

GT25 rugged model

External dimensions
Unit: mm (inch)

GT2507T-W

Panel cut dimensions
Unit: mm (inch)

Screen size	Model	A	B	Remarks
7" widescreen	GT2507T-W	197 (7.76)	141 (5.55)	—

A $^{+1\ (0.04)}_{0\ (0)}$

B $^{+1\ (0.04)}_{0\ (0)}$

Panel opening

* Panel thickness: 1.6 mm to 4 mm
(0.06 inch to 0.16 inch)

GT23 model

External dimensions
Unit: mm (inch)

GT2310

GT2308

Panel cut dimensions
Unit: mm (inch)

Screen size	Model	A	B	Remarks
10.4"	GT2310	289 (11.38)	200 (7.87)	Same dimensions as GT167☐, GT157☐, GT1275, A97☐GOT.
8.4"	GT2308	227 (8.94)	176 (6.93)	Same dimensions as GT166☐, GT156☐, GT1265.

A $^{+2\ (0.08)}_{0\ (0)}$

B $^{+2\ (0.08)}_{0\ (0)}$

Panel opening

* Panel thickness: 1.6 mm to 4 mm
(0.06 inch to 0.16 inch)

Specifications

GT21 wide model

External dimensions
Unit: mm (inch)

GT2107-W

Panel cut dimensions
Unit: mm (inch)

Screen size	Model	A	B	Remarks
7" widescreen	GT2107-W	180.5 (7.11)	133.5 (5.26)	—

$A\,^{+1\,(0.04)}_{\ 0\,(0)}$

Panel opening

$B\,^{+1\,(0.04)}_{\ 0\,(0)}$

* Panel thickness: 1.6 mm to 4 mm
(0.06 inch to 0.16 inch)

GT21 model

External dimensions
Unit: mm (inch)

GT2104-RTBD	GT2103-PMBD	GT2103-PMBDS/GT2103-PMBDS2/GT2103-PMBLS

Panel cut dimensions
Unit: mm (inch)

Screen size	Model	A	B	Remarks
4.3"	GT2104	118 (4.65)	92 (3.62)	—
3.8"	GT2103	105 (4.13)	66 (2.60)	Same dimensions as GT1020.

$A\,^{+1\,(0.04)}_{\ 0\,(0)}$

Panel opening

$B\,^{+1\,(0.04)}_{\ 0\,(0)}$

* Panel thickness: 1 mm to 4 mm
(0.04 inch to 0.16 inch)

GS21 model

External dimensions

Unit: mm (inch)

GS2110-WTBD

GS2107-WTBD

Panel cut dimensions

Unit: mm (inch)

Screen size	Model	A	B	Remarks
10" widescreen	GS2110-W	258 (10.16)	200 (7.88)	—
7" widescreen	GS2107-W	191 (7.52)	137 (5.40)	—

$A^{+2\ (0.08)}_{0\ (0)}$

$B^{+2\ (0.08)}_{0\ (0)}$

Panel opening

* Panel thickness: 1.6 mm to 4 mm
(0.06 inch to 0.16 inch)

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Specifications

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Specifications

Communication cable

External dimensions

■ RS-232 connection cable connector

Cable model	Cable length (m(ft.))	External dimensions
GT01-C30R2-6P	3(10)	(1)
GT01-C30R2-9S	3(10)	(2)
GT01-C30R2-25P	3(10)	(3)
GT10-C30R2-6P	3(10)	(4)

Unit: mm (inch)

(1) GT01-C30R2-6P

(2) GT01-C30R2-9S

(3) GT01-C30R2-25P

(4) GT10-C30R2-6P

■ RS-422 connection cable connector

Cable model	Cable length (m(ft.))	External dimensions
GT16-C02R4-9S	0.2(0.7)	(1)
GT01-C30R4-25P	3(10)	(2)
GT01-C□R4-25P	10(33), 20(66), 30(98)	(3)
GT01-C□R4-8P	1(3), 3(10), 10(33), 20(66), 30(98)	(4)
GT10-C□R4-8P	1(3), 3(10), 10(33), 20(66), 30(98)	(5)
GT10-C□R4-25P	3(10), 10(33), 20(66), 30(98)	(6)

Cable model	Cable length (m(ft.))	External dimensions
GT21-C□R4-8P5	1(3), 3(10), 10(33), 20(66), 30(98)	(5)
GT21-C□R4-25P5	3(10), 10(33), 20(66), 30(98)	(6)
GT10-C10R4-8PL	1(3)	(7)
GT10-C□R4-8PC	1(3), 3(10), 10(33), 20(66), 30(98)	(8)
GT10-C02H-9SC	0.2(0.7)	(9)

Unit: mm (inch)

(1) GT16-C02R4-9S

(2) GT01-C30R4-25P

(3) GT01-C□R4-25P

(4) GT01-C□R4-8P

(5) GT10-C□R4-8P, GT21-C□R4-8P5

(6) GT10-C□R4-25P, GT21-C□R4-25P5

(7) GT10-C10R4-8PL

(8) GT10-C□R4-8PC

(9) GT10-C02H-9SC

■ RS-485 terminal block conversion unit

Cable model	Cable length (m(ft.))	External dimensions
FA-LTBGT2R4CBL□	0.5(1.6), 1(3.3), 2(6.6)	(1)

Unit: mm (inch)

(1) FA-LTBGT2R4CBL□

■ Connection cable for Handy GOT

Cable model	Cable length (m(ft.))	External dimensions	Cable model	Cable length (m(ft.))	External dimensions
GT16H-C□□□-42P	3(10), 6(20), 10(33)	(1)	GT11H-C□□□	3(10), 6(20), 10(33)	(5)
GT16H-C□□□-37PE	3(10), 6(20), 10(33)	(2)	GT11H-C15R4-8P	15(49)	(6)
GT14H-C□□□-42P	3(10), 6(20), 10(33)	(3)	GT11H-C15R4-25P	15(49)	(7)
GT11H-C□□□-37P	3(10), 6(20), 10(33)	(4)	GT11H-C15R2-6P	15(49)	(8)

Unit: mm (inch)

(1) GT16H-C□□□-42P

(5) GT11H-C□□□

(2) GT16H-C□□□-37PE

(6) GT11H-C15R4-8P

(3) GT14H-C□□□-42P

(7) GT11H-C15R4-25P

(4) GT11H-C□□□-37P

(8) GT11H-C15R2-6P

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Specifications

Specifications

Operating environment

MELSOFT GT Works3 Version1 (English Version) operating environment

Item	Description
Personal computer	Personal computer that Windows® runs on.
OS (English, Simplified Chinese, Traditional Chinese, Korean, or German version)	Microsoft® Windows® 10 (Enterprise, Pro) (64 bit/32 bit) *1 *3 *5 *7 *8 *9 Microsoft® Windows® 10 (Home) (64 bit/32 bit) *1 *3 *5 *8 *9 Microsoft® Windows® 10 (IoT Enterprise 2016 LTSB) (64 bit) (English OPK, or English OPK and a language pack for localization) *1 *3 *5 *7 *8 *9 Microsoft® Windows® 8.1 (Enterprise, Pro) (64 bit/32 bit) *1 *3 *5 *6 *7 Microsoft® Windows® 8.1 (64 bit/32 bit) *1 *3 *5 *6 Microsoft® Windows® 8 (Enterprise, Pro) (64 bit/32 bit) *1 *3 *5 *6 *7 Microsoft® Windows® 8 (64 bit/32 bit) *1 *3 *5 *6 Microsoft® Windows® 7 (Enterprise, Ultimate, Professional) (64 bit/32 bit) *1 *3 *4 *5 Microsoft® Windows® 7 (Home Premium) (64 bit/32 bit) *1 *3 *5 Microsoft® Windows® 7 (Starter) (32 bit) *1 *3 Microsoft® Windows Vista® (Enterprise, Ultimate, Business, Home Premium, Home Basic) (32 bit) Service Pack1 or later *1 *3 Microsoft® Windows® XP (Professional, Home Edition) (32 bit) Service Pack3 or later *2 *3
CPU	Intel® Core™2 Duo Processor 2.0 GHz or more recommended
Memory	For a 64-bit OS: 2 GB or more recommended For a 32-bit OS: 1 GB or more recommended
Display	Resolution XGA (1024 × 768 dots) or higher
Hard disk space	For installation: 5 GB or more recommended For execution: 512 MB or more recommended
Display color	High Color (16 bits) or higher

Other hardware	Use the hardware compatible with the above OS.
	  • For installation: mouse, keyboard, DVD-ROM drive
	  • For execution: mouse, keyboard
	  • For printing: printer
	Use the following hardware when required.
	  • For simulation (only when outputting the buzzer sound): sound card, speaker

Compatible GOT	GOT2000 Series, GOT1000 Series
Applicable software version	GT Works3 Version1.225K or later

*1 For installation, administrator privileges are required.
   For startup, the standard user or administrator account is required. To use GT Designer3 with another MELSOFT application that runs with administrator privileges, run GT Designer3 with administrator privileges.
   If you change any setting of the personal computer while GT Designer3 is running, the change will not be applied to GT Designer3.

*2 For installation, administrator privileges are required.

*3 The following functions are not supported.
  • Application start in Windows compatibility mode
  • Fast user switching
  • Change your desktop themes (fonts)
  • Remote desktop
  • DPI setting other than the normal size (For Windows® XP and Windows Vista®)
  • Setting the size of text and illustrations on the screen to any size other than [Small-100%] (For Windows® 10, Windows® 8.1, Windows® 8, and Windows® 7)

*4 Windows XP Mode is not supported.

*5 The touch feature is not supported.

*6 Modern UI Style is not supported.

*7 Hyper-V is not supported.

*8 Tablet mode is not supported.

*9 Unified Write Filter is not supported.

GT SoftGOT2000 Version1 (English Version) operating environment

Item	Description
Personal computer	Personal computer that Windows® runs on. PPC-852-21G, and PPC-852-22F manufactured by CONTEC CO., LTD *9 MELIPC (MI5122-VW, MI3321G-W, MI3315G-W, MI2012-W, MI2012-W-CL) *15
OS (English, Simplified Chinese, Traditional Chinese, Korean, or German version)	Microsoft® Windows Server® 2016 (Standard) (64 bit) *1 *3 *5 *7 Microsoft® Windows Server® 2012 (R2 Standard) (64 bit) *1 *3 *5 *6 *7 Microsoft® Windows Server® 2008 (R2 Enterprise, R2 Standard) (64 bit) *1 *3 *4 *5 Microsoft® Windows® 10 (Enterprise, Pro) (64 bit/32 bit) *1 *3 *5 *7 Microsoft® Windows® 10 (Home) (64 bit/32 bit) *1 *3 *5 Microsoft® Windows® 10 (IoT Enterprise 2019 LTSC) (64 bit) (English OPK, or English OPK and a language pack for localization) *1 *3 *5 *7 *12 *13 Microsoft® Windows® 10 (IoT Enterprise 2016 LTSB) (64 bit) (English OPK, or English OPK and a language pack for localization) *1 *3 *5 *7 *12 *13 Microsoft® Windows® 8.1 (Enterprise, Pro) (64 bit/32 bit) *1 *3 *5 *6 *7 Microsoft® Windows® 8.1 (64 bit/32 bit) *1 *3 *5 *6 Microsoft® Windows® 8 (Enterprise, Pro) (64 bit/32 bit) *1 *3 *5 *6 *7 Microsoft® Windows® 8 (64 bit/32 bit) *1 *3 *5 *6 Microsoft® Windows® 7 (Enterprise, Ultimate, Professional) (64 bit/32 bit) *1 *3 *4 *5 Microsoft® Windows® 7 (Home Premium) (64 bit/32 bit) *1 *3 *5 Microsoft® Windows® 7 (Starter) (32 bit) *1 *3 Microsoft® Windows Vista® (Enterprise, Ultimate, Business, Home Premium, Home Basic) (32 bit) Service Pack1 or later *1 *3 Microsoft® Windows® XP (Professional, Home Edition) (32 bit) Service Pack3 or later *2 *3 Microsoft® Windows® XP Embedded (32 bit) *2 *3 *8
CPU	Intel® Core™2 Duo Processor 2.0 GHz or more recommended
Memory	For a 64-bit OS: 2 GB or more recommended For a 32-bit OS: 1 GB or more recommended
Display	Resolution XGA (1024 × 768 dots) or higher
Hard disk space *10	For installation: 5 GB or more recommended For execution: 512 MB or more recommended
Display color	High Color (16 bits) or higher
Hardware	GT27-SGTKEY-U (license key (for USB port))
Other software	The following software is required to create the project data. • GT Designer3 Version1.100E or later *11 *14 The following software is required for interaction with PX Developer. • PX Developer Version1.40S or later • GT Designer3 Version1.105K or later *11 The following software is required to connect with GX Simulator. • GX Simulator Version5.00A or later The following software is required to connect with GX Simulator2. • GX Works2 Version1.12N or later The following software is required to connect with GX Simulator3. • GX Works3 Version1.007H or later The following software is required to connect with MT Simulator2. • MT Works2 Version1.70Y or later The following software is required to use the OPC UA client connection. • GT OPC UA Client *16
Other hardware	Use the hardware compatible with the above OS. • For installation: mouse, keyboard, DVD-ROM drive • For execution: mouse, keyboard • For printing: printer Prepare the following hardware if necessary. • For execution (only when outputting buzzer sound or others): sound function, speaker

*1 Administrator authority is required for installing and using GT SoftGOT2000.
To use GT SoftGOT2000 and other MELSOFT products in a single personal computer together, other MELSOFT products must also run with administrator authority.

*2 Administrator authority is required for installing and using GT SoftGOT2000.

*3 The following functions are not supported.
• Application start in Windows compatibility mode
• Fast user switching
• Change your desktop themes (fonts)
• Remote desktop
• DPI setting other than the normal size (For Windows® XP and Windows Vista®)
• Setting the size of text and illustrations on the screen to any size other than [Small-100%] (For Windows® 10, Windows® 8.1, Windows® 8, and Windows® 7)

*4 Windows XP Mode is not supported.

*5 Tapping and press-and-hold operation are the supported touch operation.
The following operations cannot be performed with touch operation because operations such as flicking are not supported.
• Simultaneous 2-point press on the touch switch
• Moving the overlap window and key window by slide operation
When [Allow press-and-hold of a mouse button to function as a right-click] is selected in the [Environment Setup] dialog of GT SoftGOT2000, the following operations also cannot be performed.
• Touch switch operation with [Momentary] selected for [Action]
• Touch switch operation with [ON] selected for [Delay]
• Operation of the utility call key

*6 Modern UI Style is not supported.

*7 Hyper-V is not supported.

*8 For using the PPC-852-22F, GT SoftGOT2000 can be used on the PPC-852-22F with the OS preinstalled only.

*9 Refer to the manual of the PC CPU module to be used.

*10 When using GT Designer3 or PX Developer besides GT SoftGOT2000, additional free space is required.
For the available space required when using GT Designer3, please refer to the GT Works3 operating environment.
For the available space required when using monitor tool functions of PX Developer, please refer to the following manual.
⇒ PX Developer Version □ Operating Manual (Monitor Tool)
When using a user-created application, free space is required separately.

*11 Use GT Designer3 included in GT Works3 that contains GT SoftGOT2000.

*12 The following OSs are not supported.
• Microsoft® Windows® 10 IoT Enterprise for Retail or Thin Client
• Microsoft® Windows® 10 IoT Enterprise for Tablets
• Microsoft® Windows® 10 IoT Enterprise for Small Tablets

*13 The environments that use the following lockdown features are not supported.
• Unified Write Filter
• Assigned Access
• USB Filter
• Layout Control
• AppLocker
• Shell Launcher

*14 To use the Edgecross interaction function, Version1.195D or later is required.

*15 Microsoft® Windows® 10 IoT Enterprise 2016 LTSB is preinstalled. For the specifications of the MELIPC, refer to the following.
• MELIPC MI5000 Series User's Manual (Startup)
• MELIPC MI3000 User's Manual
• MI2012-W User's Manual

*16 To use the OPC UA client connection, use Windows® 7 or later.

Specifications

Function list

For the details of functions, supported controllers, and connection types, please refer to the relevant manual or Help of the GOT2000 Series.
●: Supported　—: Not supported

Category		Function name	Necessary devices *1	GT27	GT25	GT25 Wide	GT25 Handy	GT25 Rugged
Hardware specifications	Screen size	15"		●	—	—	—	—
		12.1"		●	●	—	—	—
		10.4"		●	●	—	—	—
		10.1" Wide		—	—	●	—	—
		10" Wide		—	—	—	—	—
		8.4"		●	●	—	—	—
		7" Wide		—	—	●	—	●
		6.5"		—	—	—	●	—
		5.7"		●	●	—	—	—
		4.3"		—	—	—	—	—
		3.8"		—	—	—	—	—
	Resolution	WXGA 1280 × 800		—	—	●	—	—
		XGA 1024 × 768		●	—	—	—	—
		SVGA 800 × 600		●	—	—	—	—
		WVGA 800 × 480		—	—	●	—	●
		VGA 640 × 480		●	●	—	●	—
		Other		—	—	—	—	—
	Color	65536 colors		●	●	●	●	●
		Monochrome (black/white) 32 shade grayscale		—	—	—	—	—
		Touch panel simultaneous press (2 points)		●	—	—	—	—
		Human sensor		● *10	—	—	—	—
	Memory	Memory for storage (ROM)		Other than below: 57 MB GT2705: 32 MB	32 MB	32 MB	32 MB	32 MB
		Memory for operation (RAM)		Other than below: 128 MB GT2705: 80 MB	80 MB	128 MB	80 MB	128 MB
	Interface	RS-232		●	●	●	●	●
		RS-422/485		●	●	●	● GT2505HS supports RS-422 only	●
		Ethernet	(Ethernet communication unit)	● 2 ports by installing communication unit	● 2 ports by installing communication unit *17	2 ports as standard	●	● 2 ports as standard
		USB host		●	●	●	●	●
		USB device		●	●	●	●	●
		SD memory card interface		●	●	●	●	●
		Extension interface, Side interface, Wireless LAN communication unit interface	Communication units, option units	●*11	●*11 *17	●*11	—	●*11
Screen design	Figure/object functions	Figure		●	●	●	●	●
		Logo text		●	●	●	●	●
		Outline font		●	●	●	●	●
		Touch switch		●	●	●	●	●
		Lamp		●	●	●	●	●
		Numerical display, Numerical input		●	●	●	●	●
		Text display, Text input		●	●	●	●	●
		Date display, Time display	(Battery)	●	●	●	●	●
		Comment display		●	●	●	●	●
		Parts display	(SD memory card or USB memory)	●	●	●	●	●
		Parts movement	(SD memory card or USB memory)	●	●	●	●	●
		Historical data list display	(SD memory card or USB memory)	●	●	●	●	●
		Simple alarm display		●	●	●	●	●
		System alarm display		●	●	●	●	●
		Alarm display (user)	(SD memory card or USB memory, battery)	●	●	●	●	●
		Alarm display (system)	(SD memory card or USB memory, battery)	●	●	●	●	●
		Recipe display (record list)		●	●	●	●	●
		Line graph		●	●	●	●	●
		Trend graph		●	●	●	●	●
		Bar graph		●	●	●	●	●
		Statistic bar graph		●	●	●	●	●
		Statistic pie graph		●	●	●	●	●
		Scatter graph		●	●	●	●	●
		Historical trend graph	(SD memory card or USB memory)	●	●	●	●	●
		Graphical meter		●	●	●	●	●
		Level		●	●	●	●	●
		Panelmeter		●	●	●	●	●
		Slider		●	●	●	●	●
		Document display	SD memory card	●	●	●	●	●
		Script parts		●	●	●	●	●
	Functions performed on background of GOT	Logging	(SD memory card or USB memory, battery)	●	●	●	●	●
		Recipe	(SD memory card or USB memory, battery)	●	●	●	●	●
		Device data transfer		●	●	●	●	●
		Trigger action		●	●	●	●	●
		Time action	(SD memory card or USB memory)	●	●	●	●	●
		Hard copy — File output	(SD memory card or USB memory)	●	●	●	●	●
		Hard copy — Serial printer output		●	●	●	—	●
		Hard copy — Ethernet printer output NEW		●	●	●	●	●
		Hard copy — PictBridge printer output	Printer unit	●	●*17	—	—	—
		Project script, Screen script		●	●	●	●	●
		Object script		●	●	●	●	●

*1　Necessary units when using GT27, GT25, GT25 wide, GT25 handy, GT25 rugged, GT23, GT21 wide, GT21, or GS21 models are shown. Parenthesized devices are required depending on conditions of use.
*2　Data is output to the printer that is recognized by the personal computer.
*3　CSV files are saved in the virtual drive of the personal computer so that it is recommended to output the files to printers.
*4　Only the GOTs with SVGA or higher resolution are supported.
*5　Remote personal computer operation function (Ethernet) cannot be used. The following screens are displayed horizontally: utility screen, monitor and data management screens that are displayed from the utility screen (sequence program monitor, etc.), video camera images in the multimedia and video display functions. For the details of other GOT operations when placed vertically, please refer to the relevant product manual or Help.
*6　Excluding GT2103-PMBLS.
*7　GT2104-RTBD only.

8 Specifications

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For the details of functions, supported controllers, and connection types, please refer to the relevant manual or Help of the GOT2000 Series.

●: Supported　—: Not supported

Category	Function name	Necessary devices *1	GT23	GT21 Wide	GT21	GS21	GT SoftGOT2000
Hardware specifications / Screen size	15"		—	—	—	—	
	12.1"		—	—	—	—	
	10.4"		●	—	—	—	
	10.1" Wide		—	—	—	—	
	10" Wide		—	—	—	●	
	8.4"		●	—	—	—	
	7" Wide		—	●	—	●	
	6.5"		—	—	—	—	
	5.7"		—	—	—	—	
	4.3"		—	—	●	—	
	3.8"		—	—	●	—	
Hardware specifications / Resolution	WXGA 1280 × 800		—	—	—	—	Flexible resolution 640 to 1920 × 480 to 1200
	XGA 1024 × 768		—	—	—	—	
	SVGA 800 × 600		—	—	—	—	
	WVGA 800 × 480		—	●	—	●	
	VGA 640 × 480		●	—	—	—	
	Other		—	—	GT2104-R: 480 × 272 GT2103-P: 320 × 128	—	
Hardware specifications / Color	65536 colors		●	●	●	●	●
	Monochrome (black/white) 32 shade grayscale		—	—	●	—	—
	Touch panel simultaneous press (2 points)		—	—	—	—	—
	Human sensor		—	—	—	—	—
Hardware specifications / Memory	Memory for storage (ROM)		9 MB	15 MB	GT2104-R: 9 MB GT2103-P: 3 MB	9 MB	57 MB
	Memory for operation (RAM)		9 MB	—	—	—	—
Hardware specifications / Interface	RS-232		●	●	●*20	●	●*12
	RS-422/485		●	●	●*20	● RS-422 only	●*12
	Ethernet	(Ethernet communication unit)	●	●	●*20	●	●*11
	USB host		●	●	—	—	●*13
	USB device		●	●	●	●	
	SD memory card interface		●	●	●*14	●	●*13
	Extension interface, Side interface, Wireless LAN communication unit interface	Communication units, option units	—	—	—	—	●*11
Screen design / Figure/object functions	Figure		●	●	●	●	●
	Logo text		●	●	●	●	●
	Outline font		●	●	—	●	●
	Touch switch		●	●	●	●	●
	Lamp		●	●	●	●	●
	Numerical display, Numerical input		●	●	●	●	●
	Text display, Text input		●	●	●	●	●
	Date display, Time display	(Battery)	●	●	●	●	●
	Comment display		●	●	●	●	●
	Parts display	(SD memory card or USB memory)	●	●	●*16	●	●
	Parts movement	(SD memory card or USB memory)	●	●	●*16	●	●
	Historical data list display	(SD memory card or USB memory)	●	●	●*16	●	●
	Simple alarm display		●	●	●	●	●
	System alarm display		●	—	—	—	●
	Alarm display (user)	(SD memory card or USB memory, battery)	●	●	●*16	●	●
	Alarm display (system)	(SD memory card or USB memory, battery)	●	—	—	—	●
	Recipe display (record list)		●	●	●	●	●
	Line graph		●	●	●	●	●
	Trend graph		●	●	●	●	●
	Bar graph		●	●	●	●	●
	Statistic bar graph		●	●	●	●	●
	Statistic pie graph		●	●	●	●	●
	Scatter graph		●	●	●	●	●
	Historical trend graph	(SD memory card or USB memory)	●	●	●*16	●	●
	Graphical meter		●	●	●	●	●
	Level		●	●	●	●	●
	Panelmeter		●	●	●	●	●
	Slider		●	●	●	●	●
	Document display	SD memory card	—	—	—	—	●
	Script parts		●	●	●	●	●
Screen design / Functions performed on background of GOT	Logging	(SD memory card or USB memory, battery)	●	●	●*6	●	●
	Recipe	(SD memory card or USB memory, battery)	●	●	●*16	●	●
	Device data transfer		●	●	●	●	●
	Trigger action		●	●	●	●	●
	Time action	(SD memory card or USB memory)	●	●	●	●	●
	Hard copy / File output	(SD memory card or USB memory)	●	●	●*6	●	●
	Hard copy / Serial printer output		●	●	●*6	●	●*2
	Hard copy / Ethernet printer output NEW		●	●	●*15	●	—
	Hard copy / PictBridge printer output	Printer unit	—	—	—	—	●*2
	Project script, Screen script		●	●	●	●	●
	Object script		●	—	—	—	●

*8 Excluding GT2705-VTBD.
*9 To use multiple units such as extension units, barcode readers, or RFID controllers with a GT2705-VTBD, the total current consumption of the units should be less than the value that the GT2705-VTBD can provide. For the details, please refer to the relevant manual of the GOT2000 Series.
*10 GT2715-XTBA, GT2715-XTBD, GT2712-STBA, GT2712-STBD, GT2712-STWA, GT2712-STWD only.
*11 For the applicable communication units and option units, please refer to "Connectable model list" (page 152), "Product list" (page 172), and the relevant product manual.
*12 Use the standard interface of the personal computer.
*13 When using functions that require a USB memory or SD memory card, a virtual drive in the personal computer is used.

*14 GT2103-PMBD, GT2103-PMBDS, and GT2103-PMBDS2 require an SD memory card unit (GT21-03SDCD) separately. GT2103-PMBLS does not allow for SD memory cards.
*15 GT2104-RTBD, GT2103-PMBD only.
*16 On GT2103-PMBLS, only the functions that do not require SD memory card can be used.
*17 Excluding GT2505-VTBD.
*18 GT25 wide models have a built-in sound output interface so that the sound output unit is not required.
*19 GT2505HS-VTBD supports the function with Ethernet connection only.
*20 GT21 has different interfaces depending on the model. For the details, please refer to the performance specifications on pages 134 and 135.
*21 Only Ethernet, OPC UA client, and microcomputer connections are supported.

Specifications

Function list

For the details of functions, supported controllers, and connection types, please refer to the relevant manual or Help of the GOT2000 Series.
●: Supported　—: Not supported

Category	Function name	Necessary devices *1	GT27	GT25	GT25 Wide	GT25 Handy	GT25 Rugged
Functions used with peripheral devices	Barcode function		●	●	●	—	●
	RFID function		●	●	●	—	●
	GOT Mobile function	License, (SD memory card)	●	●	●	●	●
	VNC server function	License	●	●	●	●	●
	Remote personal computer operation function (Ethernet)	License	●	●	●	●	●
	Remote personal computer operation function (serial)	RGB input unit or Video/RGB input unit	● *8	—	—	—	—
	Video display function	Video input unit or Video/RGB input unit	● *8	—	—	—	—
	RGB display function	RGB input unit or Video/RGB input unit	● *8	—	—	—	—
	Multimedia function	Multimedia unit, CF card	● *8	—	—	—	—
	External I/O function	External I/O unit	●	● *17	—	—	—
	Operation panel function	External I/O unit	●	● *17	—	—	—
	Video output function HDMI output NEW	Digital video output unit	● *8	—	—	—	—
	Video output function RGB output	RGB output unit	● *8	—	—	—	—
	Report function File output NEW	(SD memory card or USB memory)	●	●	●	●	●
	Report function Serial printer output	(SD memory card or USB memory)	●	●	●	—	●
	Report function Ethernet printer output NEW	(SD memory card or USB memory)	●	●	●	●	●
	Report function PictBridge printer output	SD memory card or USB memory, printer unit	●	● *17	—	—	—
	Sound output function	Sound output unit *18	●	● *17	● *18	—	● *18
	Server function, Client function		●	●	●	●	●
	Mail send function		●	●	●	●	●
	Network drive function NEW		●	●	●	●	●
	FTP server function	(SD memory card or USB memory)	●	●	●	●	●
	File transfer function (FTP transfer)	SD memory card or USB memory	●	●	●	●	●
	File transfer function (GOT internal transfer)	SD memory card or USB memory	●	●	●	●	●
	MES interface function	License, (SD memory card)	●	●	●	●	●
	Wireless LAN function	Wireless LAN communication unit	●	● *17	●	—	●
	USB mouse, USB keyboard		●	●	●	●	●
GOT functions	Base screen		●	●	●	●	●
	Overlap window		●	●	●	●	●
	Superimpose window		●	●	●	●	●
	Dialog window		●	●	●	●	●
	Mobile screen		●	●	●	●	●
	Key window		●	●	●	●	●
	Language switching		●	●	●	●	●
	System information		●	●	●	●	●
	Operator authentication function	(SD memory card or USB memory)	●	●	●	●	●
	Operation log	SD memory card or USB memory	●	●	●	●	●
	Startup logo		●	●	●	●	●
	KANA KANJI conversion		●	●	●	●	●
	FA transparent		●	●	●	●	●
	SoftGOT-GOT link	License key	●	●	●	●	●
	Backup/Restoration	SD memory card or USB memory	●	●	●	●	●
	Multi-channel function		● *9 4 channels (Up to 3 units)	● 4 channels (Up to 3 units *17)	● 4 channels (No units can be mounted)	● *19 4 channels (No units can be mounted)	● 4 channels (No units can be mounted)
	Station No. switching		●	●	●	●	●
	GOT network interaction		●	●	●	●	●
	Screen gesture function		●	—	—	—	—
	Object gesture function		●	—	—	—	—
	Security key authentication function		●	●	●	●	●
	IP filter function		●	●	●	●	●
	File manager	(SD memory card or USB memory)	●	●	●	●	●
	Vertical display *5		● (Rotate 90 ° to left)	● (Other than below: rotate 90° to left GT2505: rotate 90° to right)	● (Rotate 90 ° to left)	—	● (Rotate 90 ° to left)
Maintenance functions	Device monitor	(SD memory card or USB memory)	●	●	●	●	●
	Sequence program monitor (iQ-R ladder)	SD memory card or USB memory	●	●	●	●	●
	Sequence program monitor (Ladder)	SD memory card or USB memory	●	●	●	●	●
	Sequence program monitor (SFC)	SD memory card or USB memory	●	●	●	●	●
	Network monitor		●	●	●	●	●
	CC-Link IE Field Network diagnostics		●	●	●	●	●
	Intelligent module monitor		●	●	●	●	●
	Drive recorder	(SD memory card or USB memory)	●	●	●	●	●
	Servo amplifier graph NEW	(SD memory card or USB memory)	●	●	●	●	●
	Motion program editor NEW		● *4	● *4	—	—	—
	Motion program I/O NEW	SD memory card or USB memory	● *4	● *4	—	—	—
	Servo amplifier monitor		●	●	●	●	●
	R motion monitor		●	●	●	●	●
	Q motion monitor		●	●	●	●	●
	Motion SFC monitor	SD memory card or USB memory	●	●	●	●	●
	CNC monitor 2		●	●	—	●	—
	CNC monitor		● *4	● *4	—	—	—
	CNC data I/O	SD memory card or USB memory	● *4	● *4	—	—	—
	CNC machining program edit		● *4	● *4	—	—	—
	Log viewer	(SD memory card or USB memory)	●	●	●	●	●
	FX list editor		●	●	—	●	—
	FX ladder monitor		●	●	●	●	●
	iQSS utility	SD memory card or USB memory	●	●	●	●	●
	System launcher		●	●	●	●	●
	System launcher (servo network)		●	●	●	●	●
	MELSEC-L troubleshooting		●	●	●	●	●

*1　Necessary units when using GT27, GT25, GT25 wide, GT25 handy, GT25 rugged, GT23, GT21 wide, GT21, or GS21 models are shown. Parenthesized devices are required depending on conditions of use.

*2　Data is output to the printer that is recognized by the personal computer.

*3　CSV files are saved in the virtual drive of the personal computer so that it is recommended to output the files to printers.

*4　Only the GOTs with SVGA or higher resolution are supported.

*5　Remote personal computer operation function (Ethernet) cannot be used. The following screens are displayed horizontally: utility screen, monitor and data management screens that are displayed from the utility screen (sequence program monitor, etc.), video camera images in the multimedia and video display functions. For the details of other GOT operations when placed vertically, please refer to the relevant product manual or Help.

*6　Excluding GT2103-PMBLS.

*7　GT2104-RTBD only.

Specifications

For the details of functions, supported controllers, and connection types, please refer to the relevant manual or Help of the GOT2000 Series.
●: Supported　—: Not supported

Category	Function name		Necessary devices *1	GT23	GT21 Wide	GT21	GS21	GT SoftGOT2000
Functions used with peripheral devices	Barcode function			●	●	● *6	●	●
	RFID function			●	●	● *6	●	●
	GOT Mobile function		License, (SD memory card)	—	—	—	—	—
	VNC server function		License	—	●	—	—	—
	Remote personal computer operation function (Ethernet)		License	—	—	—	—	—
	Remote personal computer operation function (serial)		RGB input unit or Video/RGB input unit	—	—	—	—	—
	Video display function		Video input unit or Video/RGB input unit	—	—	—	—	—
	RGB display function		RGB input unit or Video/RGB input unit	—	—	—	—	—
	Multimedia function		Multimedia unit, CF card	—	—	—	—	—
	External I/O function		External I/O unit	—	—	—	—	—
	Operation panel function		External I/O unit	—	—	—	—	●
	Video output function	HDMI output **NEW**	Digital video output unit	—	—	—	—	—
		RGB output	RGB output unit	—	—	—	—	—
	Report function	File output **NEW**	(SD memory card or USB memory)	●	—	—	—	● *3
		Serial printer output	(SD memory card or USB memory)	●	●	● *6	●	● *3
		Ethernet printer output **NEW**	(SD memory card or USB memory)	●	●	● *15	●	● *3
		PictBridge printer output	SD memory card or USB memory, printer unit	—	—	—	—	● *3
	Sound output function		Sound output unit *18	—	—	—	—	●
	Server function, Client function			—	—	—	—	●
	Mail send function			—	—	—	—	●
	Network drive function **NEW**			—	—	—	—	●
	FTP server function		(SD memory card or USB memory)	●	●	● *15	●	—
	File transfer function (FTP transfer)		SD memory card or USB memory	●	●	● *15	●	—
	File transfer function (GOT internal transfer)		SD memory card or USB memory	●	—	—	—	—
	MES interface function		License, (SD memory card)	—	—	—	—	—
	Wireless LAN function		Wireless LAN communication unit	—	—	—	—	—
GOT functions	USB mouse, USB keyboard			●	●	—	—	●
	Base screen			●	●	●	●	●
	Overlap window			●	●	●	●	●
	Superimpose window			●	●	●	●	●
	Dialog window			●	●	●	●	●
	Mobile screen			—	—	—	—	—
	Key window			●	●	●	●	●
	Language switching			●	●	●	●	●
	System information			●	●	●	●	●
	Operator authentication function		(SD memory card or USB memory)	●	●	● *16	●	●
	Operation log		SD memory card or USB memory	●	—	—	—	●
	Startup logo			●	●	●	●	●
	KANA KANJI conversion			—	—	—	—	●
	FA transparent			●	●	●	●	—
	SoftGOT-GOT link		License key	—	—	—	—	●
	Backup/Restoration		SD memory card or USB memory	●	●	● *6	●	—
	Multi-channel function			● 2 channels (No units can be mounted)	● 2 channels (No units can be mounted)	● *6 2 channels (No units can be mounted)	● 2 channels (No units can be mounted)	● *21 **NEW** 4 channels
	Station No. switching			●	●	●	●	●
	GOT network interaction			●	—	—	—	●
	Screen gesture function			—	—	—	—	—
	Object gesture function			—	—	—	—	—
	Security key authentication function			●	—	—	—	—
	IP filter function			●	●	●	●	—
	File manager		(SD memory card or USB memory)	●	—	—	—	—
	Vertical display *5			● (Rotate 90° to left)	● (Rotate 90° to left)	● (Rotate 90° to right)	● (Rotate 90° to left)	—
Maintenance functions	Device monitor		(SD memory card or USB memory)	●	●	●	●	—
	Sequence program monitor (iQ-R ladder)		SD memory card or USB memory	—	—	—	—	—
	Sequence program monitor (Ladder)		SD memory card or USB memory	—	—	—	—	—
	Sequence program monitor (SFC)		SD memory card or USB memory	—	—	—	—	—
	Network monitor			—	—	—	—	—
	CC-Link IE Field Network diagnostics			—	—	—	—	—
	Intelligent module monitor			—	—	—	—	—
	Drive recorder		(SD memory card or USB memory)	—	—	—	—	—
	Servo amplifier graph **NEW**		(SD memory card or USB memory)	—	—	—	—	—
	Motion program editor **NEW**			—	—	—	—	—
	Motion program I/O **NEW**		SD memory card or USB memory	—	—	—	—	—
	Servo amplifier monitor			—	—	—	—	—
	R motion monitor			—	—	—	—	—
	Q motion monitor			—	—	—	—	—
	Motion SFC monitor		SD memory card or USB memory	—	—	—	—	—
	CNC monitor 2			—	—	—	—	—
	CNC monitor			—	—	—	—	—
	CNC data I/O		SD memory card or USB memory	—	—	—	—	—
	CNC machining program edit			—	—	—	—	—
	Log viewer		(SD memory card or USB memory)	—	—	—	—	—
	FX list editor			●	●	● *7	●	—
	FX ladder monitor			—	—	—	—	—
	iQSS utility		SD memory card or USB memory	—	—	—	—	—
	System launcher			●	—	—	—	—
	System launcher (servo network)			—	—	—	—	—
	MELSEC-L troubleshooting			—	—	—	—	—

*8　Excluding GT2705-VTBD.
*9　To use multiple units such as extension units, barcode readers, or RFID controllers with a GT2705-VTBD, the total current consumption of the units should be less than the value that the GT2705-VTBD can provide. For the details, please refer to the relevant manual of the GOT2000 Series.
*10　GT2715-XTBA, GT2715-XTBD, GT2712-STBA, GT2712-STBD, GT2712-STWA, GT2712-STWD only.
*11　For the applicable communication units and option units, please refer to "Connectable model list" (page 152), "Product list" (page 172), and the relevant product manual.
*12　Use the standard interface of the personal computer.
*13　When using functions that require a USB memory or SD memory card, a virtual drive in the personal computer is used.

*14　GT2103-PMBD, GT2103-PMBDS, and GT2103-PMBDS2 require an SD memory card unit (GT21-03SDCD) separately. GT2103-PMBLS does not allow for SD memory cards.
*15　GT2104-RTBD, GT2103-PMBD only.
*16　On GT2103-PMBLS, only the functions that do not require SD memory card can be used.
*17　Excluding GT2505-VTBD.
*18　GT25 wide models have a built-in sound output interface so that the sound output unit is not required.
*19　GT2505HS-VTBD supports the function with Ethernet connection only.
*20　GT21 has different interfaces depending on the model. For the details, please refer to the performance specifications on pages 134 and 135.
*21　Only Ethernet, OPC UA client, and microcomputer connections are supported.

Specifications

Connectable model list (GOT2000/GOT SIMPLE)

◆ **Mitsubishi Electric programmable controllers/C Controller modules/Safety controllers/Motion controllers**

Series			Model name	GT27/GT25 Ethernet connection	Direct CPU connection	Serial communication connection	CC-Link IE TSN connection *42 NEW	CC-Link IE Controller Network connection *42	CC-Link IE Field Network connection *42	CC-Link connection (intelligent device station) *42	CC-Link connection (via G4) *2	Bus connection *3 *42	MELSECNET/H connection *42	MELSECNET/10 connection *42	Multi-drop connection *5	GT23 Ethernet connection	Direct CPU connection	Serial communication connection	CC-Link connection (via G4) *2	Multi-drop connection *5	GT21/GS21 *1 Ethernet connection *6	Direct CPU connection	Serial communication connection	CC-Link connection (via G4) *2	Multi-drop connection *5 *7
Programmable controller	MELSEC iQ-R Series	Programmable controller CPU	R00CPU NEW R01CPU NEW R02CPU NEW R04CPU R08CPU R16CPU R32CPU R120CPU R04ENCPU R08ENCPU R16ENCPU R32ENCPU R120ENCPU	○	×	○	○	○	○	○	×	×	×	×	×	○	×	○	×	×	○	×	○	×	×
		Safety CPU	R08SFCPU *39 R16SFCPU *39 R32SFCPU *39 R120SFCPU *39	○	×	○	×	○	○	○	×	×	×	×	×	○	×	○	×	×	○	×	○	×	×
		Process CPU	R08PCPU *41 R16PCPU *41 R32PCPU *41 R120PCPU *41	○	×	○	×	○	○	○	×	×	×	×	×	○	×	○	×	×	○	×	○	×	×
		SIL2 process CPU NEW	R08PSFCPU *43 R16PSFCPU *43 R32PSFCPU *43 R120PSFCPU *43	○	×	×	×	○	○	○	×	×	×	×	×	○	×	×	×	×	○	×	×	×	×
	MELSEC-Q Series (Q mode)	High-speed type universal model QCPU	Q03UDVCPU Q04UDVCPU Q06UDVCPU Q13UDVCPU Q26UDVCPU	○*18	○*8	○	×	○*9	○*10	○	○	○	○*18	○*18	○*9	○*18	○*8	○	○	○*8	○*18	○*8	○	○	○*8
		Universal model QCPU	Q00UJCPU Q00UCPU Q01UCPU Q02UCPU Q03UDCPU Q04UDHCPU Q06UDHCPU Q10UDHCPU Q13UDHCPU Q20UDHCPU Q26UDHCPU	○*18	○	○	×	○*9 / ○*12 / ○*9	○*10	○	○	○	○*18	○*18	○	○*18	○	○	○	○	○*18	○	○	○	○
		Built-in Ethernet type	Q03UDECPU Q04UDEHCPU Q06UDEHCPU Q10UDEHCPU Q13UDEHCPU Q20UDEHCPU Q26UDEHCPU Q50UDEHCPU Q100UDEHCPU	○*18	○*8	○	×	○*12 / ○*9	○*10	○	○	○	○*18	○*18	○*8	○*18	○*8	○	○	○*8	○*18	○*8	○	○	○*8
		Basic model QCPU	Q00JCPU Q00CPU *16 Q01CPU *16	○*18	○	○	×	○*11 / ○*13 / ○	×	○	○	○*11 / ○	○*18	○*14 *18	○	○*18	○	○	○	○	○*18	○*15	○	○	○
		High performance model QCPU	Q02CPU *16 Q02HCPU *16 Q06HCPU *16 Q12HCPU *16 Q25HCPU *16	○*18	○	○	×	○*17	×	○	○	○	○*18	○*14 *18	○	○*18	○	○	○	○	○*18	○	○	○	○
		Process CPU	Q02PHCPU Q06PHCPU Q12PHCPU Q25PHCPU	○*18	○	○	×	○*19 / ○*21	×	○	○	○	○*18	○*14 *18	×	○*18	○	○	○	×	×	×	×	×	×
		Redundant CPU (main base)	Q12PRHCPU Q25PRHCPU	○	○	×	×	○*21	×	○	○	○	○	○*14	×	○	○	×	○	×	×	×	×	×	×
		Redundant CPU (extension base)	Q12PRHCPU Q25PRHCPU	○	×	○	×	×	×	○	○	×	×	×	×	○	×	○	○	×	×	×	×	×	×
	MELSEC-QS Series		QS001CPU	○	×	×	×	○*22	○*23	×	×	×	○	○	×	○	×	×	×	×	○	×	×	×	×
	MELSEC-L Series		L02SCPU L02SCPU-P	○*24 *25	○	○	×	×	○*26	○	○	×	×	×	○	○*24 *25	○	○	○	○	○*24 *25	○	○	○	○
			L02CPU L02CPU-P L06CPU L06CPU-P L26CPU L26CPU-P L26CPU-BT L26CPU-PBT	○*24	○*27	○	×	×	○*26	○	○	×	×	×	○*27	○*24	○*27	○	○	○*27	○*24	○*27	○	○	○*27
	MELSEC iQ-F Series		FX5U FX5UC FX5UJ NEW	○	○	×	×	×	○*38	×	×	×	×	×	×	○	○	×	×	×	○	○	×	×	×
	MELSEC-F Series		FX0 FX0S FX0N FX1 FX1S FX1N FX1NC	×	○	×	×	×	×	×	×	×	×	×	○	×	○	×	×	○	×	○	×	×	○

Specifications

For the details of the connection configuration, please refer to the GOT2000 Series Connection Manual.

Series		Model name	Connection type																				
			GT27/GT25												GT23					GT21/GS21 *1				
			Ethernet connection	Direct CPU connection	Serial communication connection	CC-Link IE TSN connection *42 NEW	CC-Link IE Controller Network connection *42	CC-Link IE Field Network connection *42	CC-Link connection (intelligent device station) *42	CC-Link connection (via G4) *2	Bus connection *3 *42	MELSECNET/H connection *42	MELSECNET/10 connection *4 *42	Multi-drop connection *5	Ethernet connection	Direct CPU connection	Serial communication connection	CC-Link connection (via G4) *2	Multi-drop connection *5	Ethernet connection *6	Direct CPU connection	Serial communication connection	CC-Link connection (via G4) *2	Multi-drop connection *5 *7
Programmable controller	MELSEC-F Series	FX2	×	○	×	×	×	×	×	×	×	×	×	○	×	○	×	×	○	×	○	×	×	○
		FX2C	×	○	×	×	×	×	×	×	×	×	×	○	×	○	×	×	○	×	○	×	×	○
		FX2N	×	○	×	×	×	×	×	×	×	×	×	○	×	○	×	×	○	×	○	×	×	○
		FX2NC	×	○	×	×	×	×	×	×	×	×	×	○	×	○	×	×	○	×	○	×	×	○
		FX3G	○*20	○	×	×	×	×	×	○*38	×	×	×	○	○*20	○	×	×	○	○*20	○	×	×	○
		FX3GC																						
		FX3U																						
		FX3UC																						
		FX3S																						
		FX3GE																						
C Controller module	MELSEC iQ-R Series	R12CCPU-V	○*37	×	○*28	×	○	○	○	×	×	×	×	×	○*37	×	○*28	×	×	○*37	×	○*28	×	×
	MELSEC-Q Series	Q24DHCCPU-V	○	○*8	○*28	×	○*9	○	×	×	×	×	○*8 *28	×	○	○*8	○*28	○	○*8 *28	○	○*8	○*28	○	○*8 *28
		Q24DHCCPU-VG																						
		Q24DHCCPU-LS																						
		Q12DCCPU-V *29																						
		Q26DHCCPU-LS																						
Safety controller	MELSEC-WS Series	WS0-CPU0	×	○	×	×	×	×	×	×	×	×	×	×	×	○	×	×	×	×	○*30	×	×	×
		WS0-CPU1																						
		WS0-CPU3																						
Motion controller	MELSEC iQ-R Series	R16MTCPU	○	×	○	×	○	○	○	×	×	×	×	×	○	×	○	×	×	○*40	×	○*40	×	×
		R32MTCPU																						
		R64MTCPU																						
	MELSEC-Q Series	Q172CPU *32 Discontinued	○*18*31	○*33	○*31	×	×	×	○*31	○*31	○*18*31	○*18*31	○*31*33	○*18*31	○*18*31	○*33	○*31	○*31	○*31*33	○*18*31	○*33	○*31	○*31	○*31*33
		Q173CPU *32 Discontinued	○*18*31	○*33	○*31	×	×	×	○*31	○*31	○*18*31	○*18*31	○*31*33	○*18*31	○*18*31	○*33	○*31	○*31	○*31*33	○*18*31	○*33	○*31	○*31	○*31*33
		Q172CPUN *32 Discontinued	○*18	○	○	×	×	×	○	○	○*18	○*18	○	○*18	○	○	○	○	○*18	○	○	○	○	○
		Q173CPUN *32 Discontinued	○*18	○	○	×	×	×	○	○	○*18	○*18	○	○*18	○	○	○	○	○*18	○	○	○	○	○
		Q172HCPU Discontinued	○*18	○*8	○	×	×	×	○	○*8	○*18	○*18	○*8	○*18	○*8	○	○	○*8	○*18	○*8	○	○	○*8	○*8
		Q173HCPU Discontinued	○*18	○*8	○	×	×	×	○	○*8	○*18	○*18	○*8	○*18	○*8	○	○	○*8	○*18	○*8	○	○	○*8	○*8
		Q172DCPU	○*18	○*8	○	×	○	×	○	○*8	○*18	○*18	○*8	○*18	○*8	○	○	○*8	○*18	○*8	○	○	○*8
		Q173DCPU	○*18	○*8	○	×	○	×	○	○*8	○*18	○*18	○*8	○*18	○*8	○	○	○*8	○*18	○*8	○	○	○*8
		Q172DCPU-S1	○*18*34	○*8	○	×	○	×	○	○*8	○*18	○*18	○*8	○*18*34	○*8	○	○	○*8	○*18*34	○*8	○	○	○*8
		Q173DCPU-S1	○*18*34	○*8	○	×	○	×	○	○*8	○*18	○*18	○*8	○*18*34	○*8	○	○	○*8	○*18*34	○*8	○	○	○*8
		Q172DSCPU	○*18	○*8	○	×	○	○	○	○*8	○*18	○*18	○*8	○*18	○*8	○	○	○*8	○*18	○*8	○	○	○*8
		Q173DSCPU	○*18	○*8	○	×	○	○	○	○*8	○*18	○*18	○*8	○*18	○*8	○	○	○*8	○*18	○*8	○	○	○*8
		Q170MCPU *35	○*18*34	○	○	×	○	×	○*10*36	○	○*18	○*18	○	○*18*34	○	○	○	○	○*18*34	○	○	○	○
		Q170MSCPU	○*18	○	○	×	○	×	×	○*36	×	○*18	○*18	×	○*18	○	○	×	○*18	○	○	×	○	○
		Q170MSCPU-S1	○*18	○	○	×	○	×	×	○*36	×	○*18	○*18	×	○*18	○	○	×	○*18	○	○	×	○	○
		MR-MQ100	○	○	×	×	×	×	×	×	×	×	×	×	○	○	×	×	×	○	○	×	×	×
MELSECNET/H remote I/O station		QJ72LP25-25	○	○	○	×	×	×	×	×	×	×	×	×	○	○	○	×	×	○	○	○	×	×
		QJ72LP25G																						
		QJ72BR15																						
CC-Link IE Field Network head module	MELSEC iQ-R Series	RJ72GF15-T2	○	×	○	×	×	○	×	×	×	×	×	×	○	×	○	×	×	○	×	○	×	×
	MELSEC-L Series	LJ72GF15-T2	×	×	○	×	×	○	×	×	×	×	×	×	×	×	○	×	×	×	×	○	×	×
CC-Link IE Field Network Ethernet adapter module		NZ2GF-ETB	×	×	×	×	×	○	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×

*1 GT2103-PMBLS supports connection with MELSEC iQ-F Series and MELSEC-F Series only.
*2 CC-Link (via G4): connect to the CC-Link system via AJ65BT-G4-S3 or AJ65BT-R2N.
*3 When using bus connection, follow the precautions below.
 •When multiple GOTs are connected, the GOT2000 Series cannot be connected with the GOT800 Series or A77GOT.
 •Bus connection cannot be established with QCPU (A mode).
 •The number of connectable GOTs is restricted according to the CPU type and the number of intelligent function modules.
 •The GOT2000 Series, GOT1000 Series, and GOT-A900 Series can be connected together in a system. Please refer to the following Technical Bulletins on the Mitsubishi Electric Factory Automation Global website (www.MitsubishiElectric.com/fa/).
 "Precautions when Replacing GOT1000 Series with GOT2000 Series" No. GOT-A-0061
 "Precautions when Replacing GOT-A900 Series with GOT2000 Series" No. GOT-A-0062
*4 Includes the case on the MELSECNET/H network system in the MNET/10 mode. The GOT cannot be connected to the remote I/O network.
*5 When the number of connected slave GOTs and the device points of each GOT increase, the device update cycle on the screen may get slower.
 (Please consider 250 points as a guide of 1 GOT, and 750 points as a guide of the total points.)
*6 Only supported by GT2107-WTBD, GT2107-WTSD, GT2104-RTBD, GT2103-PMBD, GS2110-WTBD, and GS2107-WTBD.
*7 GT2103-PMBDS2, GT2103-PMBLS, GS2110-WTBD, and GS2107-WTBD are not supported.
*8 Access via the serial port (RS-232) of QCPU in the multiple CPU system since the CPU has no built-in serial port.
*9 Use a CC-Link IE Controller Network module with the upper five digits of the serial No. later than 09042.
*10 Use a CPU with the upper five digits of the serial No. later than 12012.
*11 When using the bus extension connector box (A9GT-QCNB), attach it to the extension base unit. (Connecting it to the main base unit is not allowed.)
*12 Use a CPU and a CC-Link IE Controller Network module with the upper five digits of the serial No. later than 09042.
*13 Use a CPU of function version B or later or a CC-Link IE Controller Network module of function version D or later.
*14 In the multiple CPU system, use a CPU or a MELSECNET/H network module of function version B or later.
*15 GT2103-PMBD and GT2103-PMBLS cannot be connected to Q00J, Q00, or Q01CPU.
*16 When in multiple CPU system configuration, use a CPU of function version B or later.
*17 Use a CPU with the upper five digits of the serial No. later than 09012.
 When the total number of stations in a network is 65 or more, use a CC-Link IE Controller Network module with the upper five digits of the serial No. 09042 or later.
*18 In the Ethernet, MELSECNET/H, or MELSECNET/10 connection, to monitor a QCPU in the multiple CPU system, always use a network module of function version B or later.
*19 Use a CC-Link IE Controller Network module of function version D or later.
*20 The supported version of the main units varies depending on the Ethernet module to be used as shown below.

Ethernet module *	CPU		
	FX3U(C)	FX3G(C)	FX3S
FX3U-ENET-L	Ver. 2.21 or later	FX3U-ENET-L is not supported.	
FX3U-ENET-ADP *	Ver. 3.10 or later	Ver. 2.00 or later	Ver. 1.00 or later

 * To connect to a FX3SCPU, use a FX3U-ENET-ADP Ver.1.20 or later.
*21 Use a CPU with the upper five digits of the serial No. later than 10042 or a CC-Link IE Controller Network module of function version D or later.

*22 Use a CPU with the upper five digits of the serial No. later than 10032 or a CC-Link IE Controller Network module of function version D or later.
*23 Use a CPU with the upper five digits of the serial No. later than 13042.
*24 When using a LJ71E71-100, use a CPU with the upper five digits of the serial No. later than 14112.
*25 Use a LJ71E71-100 since the CPU has no built-in Ethernet port.
*26 Use a CPU with the upper five digits of the serial No. later than 13012.
*27 The adapter L6ADP-R2 or L6ADP-R4 is required. When using the L6ADP-R4 adapter, use a CPU with the upper five digits of the serial No. later than 15102.
*28 Use the serial port of a serial communication module controlled by another CPU on the multiple CPU system.
*29 Use a CPU with the upper five digits of the serial No. later than 12042.
*30 GT2103-PMBD and GT2103-PMBLS cannot be connected to the MELSEC-WS Series.
*31 In Ethernet connection, serial communication connection, CC-Link (intelligent device station) connection, CC-Link (via G4) connection, MELSECNET/H connection, or MELSECNET/10 connection, use main modules with the following product numbers.
 Q172CPU: Product number N******* or later
 Q173CPU: Product number M******* or later
*32 When using SV13, SV22, or SV43, use the motion CPU on which any of the following main OS software version is installed.
 ■ Ethernet connection, serial communication connection, CC-Link (intelligent device station) connection, CC-Link (via G4) connection, MELSECNET/H connection, MELSECNET/10 connection
 SW6RN-SV13Q□: 00H or later
 SW6RN-SV22Q□: 00H or late
 SW5RN-SV43Q□: 00B or later
 ■ Direct CPU connection, bus connection, multi-drop connection
 SW6RN-SV13Q□: 00E or later
 SW6RN-SV22Q□: 00E or later
 SW5RN-SV43Q□: 00B or later
*33 In direct CPU connection, bus connection, or multi-drop connection, use main modules with the following product numbers.
 Q172CPU: Product number K******* or later
 Q173CPU: Product number J******* or later
*34 PERIPHERAL I/F can be used.
*35 When using SV43, use the CPU on which any of the following main OS software version is installed.
 SW7DNC-SV43Q□: 00F or later
*36 Only the PLC CPU area (CPU No.1) can be monitored.
*37 Use the built-in Ethernet port since RJ71EN71 is not supported.
*38 Only cyclic transmission can be used.
*39 Mount a safety function module R6SFM next to the RnSFCPU on the base unit. The RnSFCPU and the safety function module R6SFM must have the same pair version. If their pair versions differ, the RnSFCPU does not operate.
*40 Up to 32 axes are supported by GT21. R standard placement method is not supported.
*41 Mount a redundant function module R6RFM next to the RnPCPU on the base unit when building a redundant system.
*42 GT2510-WXTBD, GT2510-WXTSD, GT2507-WTBD, GT2507-WTSD, GT2507T-WTSD, GT2505-VTBD, GT2506HS-VTBD, and GT2505HS-VTBD are not supported.
*43 Mount the SIL2 function module R6PSFM and redundant function module R6RFM next to the RnPSFCPU on the base unit.

Specifications

Connectable model list (GOT2000/GOT SIMPLE)

■ Modules usable when connected with Mitsubishi Electric programmable controllers/C Controller modules/Motion controllers

● Ethernet connection

CPU series	Ethernet module
MELSEC iQ-R Series C Controller module (MELSEC iQ-R Series) Motion controller (MELSEC iQ-R Series) CC-Link IE Field Network head module (MELSEC iQ-R Series)	RJ71EN71 [4] RJ71GN11-T2 [5] [6] [7] NEW
MELSEC-Q Series (Q mode) MELSEC-QS Series C Controller module (MELSEC-Q Series) Motion controller (MELSEC-Q Series)	QJ71E71-100 QJ71E71-B5 QJ71E71-B2 QJ71E71
MELSEC-L Series	LJ71E71-100 [1]
MELSEC-F Series	FX3U-ENET-L [2] FX3U-ENET-ADP [2] [3]

*1　Use a CPU with the upper five digits of the serial No. later than 14112.
*2　Options for extension controller may be required depending on the connected CPU.
*3　To connect to a FX3SCPU, use a FX3U-ENET-ADP Ver.1.20 or later.
*4　Use firmware version 12 or higher when building a redundant system.
*5　Usable with MELSEC iQ-R Series programmable controller CPUs only.
*6　To use R00CPU, R01CPU, or R02CPU, use the firmware version 11 or later.
*7　To use programmable controller CPU (excluding R00CPU, R01CPU, R02CPU), use the firmware version 43 or later.

● Serial communication connection

CPU series	Serial communication module [1]		
	Model name	CH1	CH2
MELSEC iQ-R Series C Controller module (MELSEC iQ-R Series) Motion controller (MELSEC iQ-R Series) CC-Link IE Field Network head module (MELSEC iQ-R Series)	RJ71C24 [4]	RS-232	RS-422/485
	RJ71C24-R2 [4]	RS-232	RS-232
	RJ71C24-R4 [4]	RS-422/485	RS-422/485
MELSEC-Q Series (Q mode) C Controller module (MELSEC-Q Series) Motion controller (MELSEC-Q Series) MELSECNET/H remote I/O station	QJ71C24 [2]	RS-232	RS-422/485
	QJ71C24-R2 [2]	RS-232	RS-232
	QJ71C24N	RS-232	RS-422/485
	QJ71C24N-R2	RS-232	RS-232
	QJ71C24N-R4	RS-422/485	RS-422/485
	QJ71CMO [3]	Modular connector	RS-232
	QJ71CMON [3]	Modular connector	RS-232
MELSEC-L Series CC-Link IE Field Network head module (MELSEC-L Series)	LJ71C24	RS-232	RS-422/485
	LJ71C24-R2	RS-232	RS-232

*1　Communication cannot be performed with RS-485.
*2　Either CH1 or CH2 can be used for the function version A.
　　Both CH1 and CH2 can be used together for the function version B or later.
*3　Only CH2 can be connected.
*4　Use firmware version 07 or higher when building a redundant system.

● CC-Link IE TSN connection NEW

CPU series	CC-Link IE TSN module
MELSEC iQ-R Series	RJ71GN11-T2 [1] [2] [3]

*1　Usable with MELSEC iQ-R Series programmable controller CPUs only.
*2　To use R00CPU, R01CPU, or R02CPU, use the firmware version 11 or later.
*3　To use programmable controller CPU (excluding R00CPU, R01CPU, R02CPU), use the firmware version 43 or later.

● CC-Link IE Controller Network connection

CPU series	CC-Link IE Controller Network module
MELSEC iQ-R Series C Controller module (MELSEC iQ-R Series) Motion controller (MELSEC iQ-R Series)	RJ71GP21-SX [2]
MELSEC-Q Series (Q mode) MELSEC-QS Series C Controller module (MELSEC-Q Series) Motion controller (MELSEC-Q Series)	QJ71GP21-SX [1] QJ71GP21S-SX [1]

*1　When the CC-Link IE Controller Network is in the extended mode, use a module with the upper five digits of the serial No. 12052 or later.
*2　Use firmware version 12 or higher when building a redundant system.

● CC-Link IE Field Network connection

CPU series	CC-Link IE Field Network module
MELSEC iQ-R Series C Controller module (MELSEC iQ-R Series) Motion controller (MELSEC iQ-R Series)	RJ71GF11-T2 [1] RJ71EN71 RD77GF4 RD77GF8 RD77GF16 RD77GF32
MELSEC-Q Series (Q mode) C Controller module (MELSEC-Q Series) Motion controller (MELSEC-Q Series)	QJ71GF11-T2 QD77GF4 NEW QD77GF8 NEW QD77GF16
MELSEC-QS Series	QS0J71GF11-T2
MELSEC-L Series	LJ71GF11-T2
MELSEC iQ-F Series	FX5-CCLIEF

*1　Use firmware version 12 or higher when building a redundant system.

● CC-Link (intelligent device station) connection

CPU series	CC-Link module
MELSEC iQ-R Series C Controller module (MELSEC iQ-R Series) Motion controller (MELSEC iQ-R Series) CC-Link IE Field Network head module (MELSEC iQ-R Series)	RJ61BT11 [2]
MELSEC-Q Series (Q mode) C Controller module (MELSEC-Q Series) Motion controller (MELSEC-Q Series)	QJ61BT11 QJ61BT11N
MELSEC-L Series	LJ61BT11
MELSEC iQ-F Series	FX3U-16CCL-M [1] FX5-CCL-MS
MELSEC-F Series	FX3U-16CCL-M

*1　When using an FX3U-16CCL-M with the MELSEC iQ-F Series, bus conversion module (FX5-CNV-BUS or FX5-CNV-BUSC) is required.
*2　Use firmware version 04 or higher when building a redundant system.

For the details of the connection configuration, please refer to the GOT2000 Series Connection Manual.

● CC-Link (via G4) connection

CPU series	CC-Link module	Peripheral module
MELSEC-Q Series (Q mode) C Controller module (MELSEC-Q Series) Motion controller (MELSEC-Q Series)	QJ61BT11 QJ61BT11N	AJ65BT-G4-S3 AJ65BT-R2N
MELSEC-L Series	LJ61BT11	

● MELSECNET/H connection

CPU series	MELSECNET/H network module	
	Optical loop	Coaxial bus
MELSEC-Q Series (Q mode) *1 MELSEC-QS Series Motion controller (MELSEC-Q Series)	QJ71LP21 QJ71LP21-25 QJ71LP21S-25	QJ71BR11 *1
C Controller module (MELSEC-Q Series)	QJ71LP21-25 QJ71LP21S-25	

*1　Use function version B or later of the MELSECNET/H network module and CPU.

● MELSECNET/10 connection

CPU series	MELSECNET/H (MNET/10 mode), MELSECNET/10 network module	
	Optical loop	Coaxial bus
MELSEC-Q Series (Q mode) *1 MELSEC-QS Series Motion controller (MELSEC-Q Series)	QJ71LP21 QJ71LP21-25 QJ71LP21S-25	QJ71BR11 *1
C Controller module (MELSEC-Q Series)	QJ71LP21-25 QJ71LP21S-25	

*1　Use function version B or later of the MELSECNET/H network module and CPU.

◆ Mitsubishi Electric industrial computers [NEW]

Series	Model name	GT27/GT25/GT23/GT21/GS21 *1											
		Connection type											
		Ethernet connection	Direct CPU connection	Serial communication connection	CC-Link IE TSN connection	CC-Link IE Controller Network connection	CC-Link IE Field Network connection	CC-Link connection (intelligent device station)	CC-Link connection (via G4)	Bus connection	MELSECNET/H connection	MELSECNET/10 connection	Multi-drop connection
MELIPC	MI5122-VW	○	×	×	×	×	○	×	×	×	×	×	×

*1　GT23, GT21, and GS21 support connection using Ethernet connection.

◆ Mitsubishi Electric inverters

Series		GT27/GT25/GT23/GT21/GS21 *1			
		RS-485	RS-232	Multi-drop connection	Ethernet
FR-D700 Series	FR-D7□0	○	×	×	×
	FR-D7□0S	○	×	×	×
	FR-D7□0W	○	×	×	×
FR-F700PJ Series	FR-F7□0PJ (F)	○	×	×	×
FR-E700 Series	FR-E7□0	○	×	×	×
	FR-E7□0S	○	×	×	×
	FR-E7□0W	○	×	×	×
	FR-E7□0-NE *2*3	×	×	×	○ *4
FR-F700 Series	FR-F7□0	○	×	×	×
FR-F700P Series	FR-F7□0P	○	×	×	×
FR-A800 Series	FR-A8□0	○	×	×	×
	FR-A8□2	○	×	×	×
	FR-A8□6	○	×	×	×
	FR-A8□0-GF	○	×	×	×
	FR-A8□2-GF	○	×	×	×
FR-A800 Plus Series	FR-A8□0-CRN	○	×	×	×
	FR-A8□2-CRN	○	×	×	×
	FR-A8□0-E-CRN	○	×	×	○
	FR-A8□2-E-CRN	○	×	×	○
	FR-A8□0-R2R	○	×	×	×
	FR-A8□2-R2R	○	×	×	×
	FR-A8□0-E-R2R	○	×	×	○
	FR-A8□2-E-R2R	○	×	×	○
FR-F800 Series	FR-F8□0	○	×	×	×
	FR-F8□2	○	×	×	×
	FR-F8□6	○	×	×	×
	FR-F8□0-E	○	×	×	○
	FR-F8□2-E	○	×	×	○
FR-B Series	FR-B-□□□□	○	×	×	×
FR-B3 Series	FR-B3- (N) (H) □□□□	○	×	×	×
MELIPM Series	MD-CX522-□□K	○	×	×	×
	MD-CX522-□□K-A0	○	×	×	×

*1　Except GT2103-PMBDS2 and GT2103-PMBLS.
*2　Use FR-E700-NE with SERIAL (serial No.) "*88******" or later.
*3　Use FR-E700-SC-NNE or FR-E700-SC-ENE with SERIAL (serial No.) "*89******" or later.
*4　Supports UDP only.

◆ Mitsubishi Electric servo amplifiers (general-purpose)

Series		Model name	GT27/GT25/GT23/GT21/GS21 *1			
			RS-422	RS-232	Multi-drop connection	Ethernet
MELSERVO-J4 Series		MR-J4-□A	○	○ *2	×	×
		MR-J4-□A-RJ	○	○ *2	×	×
MELSERVO-J3 Series	Discontinued	MR-J3-□A	○	○ *2	×	×
		MR-J3-□T	○	○ *2	×	×
MELSERVO-J2-Super Series	Discontinued	MR-J2S-□A	○	○	×	×
		MR-J2S-□CP	○	○	×	×
		MR-J2S-□CL	○	○	×	×
MELSERVO-J2M Series	Discontinued	MR-J2M-P8A	○	○	×	×
		MR-J2M-□DU	○	○	×	×
MELSERVO-JE Series		MR-JE-□A	○	×	×	×
		MR-JE-□C [NEW]	×	×	×	○

*1　Except GT2103-PMBLS.
*2　RS-422/232 interface converter or RS-422/232 conversion cable is required.

Specifications

Connectable model list (GOT2000/GOT SIMPLE)

◆ Mitsubishi Electric servo amplifiers (SSCNET III/H)

Servo amplifiers (SSCNET III/H) are connected to the GOT through a motion controller or simple motion module.

Series	Model name	Simple motion module	CPU type	GT27/GT25/GT23/GT21/GS21 [6]											
				Ethernet connection	Direct CPU connection	Serial communication connection	CC-Link IE TSN connection	CC-Link IE Controller Network connection	CC-Link IE Field Network connection	CC-Link connection (intelligent device station) [1]	CC-Link connection (via G4)	Bus connection	MELSECNET/H connection	MELSECNET/10 connection [2]	Multi-drop connection
MELSERVO-J4 Series	MR-J4-□B MR-J4-□B-RJ MR-J4W2-□B MR-J4W3-□B	—	RnMTCPU	○	×	○	×	○	○	○	×	×	×	×	×
		—	Q17nDSCPU	○	○	○	×	○	×	○	○	○	○	○	×
		—	Q170MSCPU	○	○	×	×	○	○	○	○	○	○	○	×
		RD77MS	RnCPU	○	×	○	○	○	○	○	×	×	×	×	×
		QD77MS [3]	QnCPU	○	○	○	×	○	○	○	○	○	○	○	×
		LD77MS	LnCPU	○	○	○	×	×	○	○	○	×	×	×	×
		FX5-40SSC-S	FX5CPU	○	○	×	×	×	×	○	×	×	×	×	×
		FX5-80SSC-S	FX5CPU	○	○	×	×	×	×	○	×	×	×	×	×
MELSERVO-JE Series	MR-JE-□B	RD77MS [4]	RnCPU	○	×	○	○	○	○	○	×	×	×	×	×
		QD77MS [5]	QnCPU	○	○	○	×	○	○	○	○	○	○	○	×
		LD77MS [5]	LnCPU	○	○	○	×	×	○	○	○	×	×	×	×
		FX5-40SSC-S	FX5CPU	○	○	×	×	×	×	○	×	×	×	×	×
		FX5-80SSC-S	FX5CPU	○	○	×	×	×	×	○	×	×	×	×	×

*1 Connect the GOT as a CC-Link intelligent device station.
*2 Only supports the case where MELSECNET/H is used in the MELSECNET/10 mode. Connection to the remote I/O network is not allowed.
*3 Use a module with the upper five digits of the serial No. later than 15041.
*4 Use a module with the firmware version 3 or later.
*5 Use a module with the upper five digits of the serial No. later than 16102.
*6 GT23, GT21, and GS21 support connection using Ethernet connection, direct CPU connection, serial communication connection, or CC-Link connection (via G4).

◆ Mitsubishi Electric servo amplifiers (CC-Link IE Field Network)

Servo amplifiers (CC-Link IE Field Network) are connected to the GOT through a simple motion module or a master/local module.

Series	Model name	Simple motion module, or master/local module	CPU type	GT27/GT25/GT23/GT21/GS21 [6] [7]											
				Ethernet connection	Direct CPU connection	Serial communication connection	CC-Link IE TSN connection	CC-Link IE Controller Network connection	CC-Link IE Field Network connection [8]	CC-Link connection (intelligent device station) [1]	CC-Link connection (via G4)	Bus connection	MELSECNET/H connection	MELSECNET/10 connection [2]	Multi-drop connection
MELSERVO-J4 Series	MR-J4-□GF MR-J4-□GF-RJ	RD77GF4 [3]	RnCPU	○	×	○	○	○	○	×	×	×	×	×	×
		RD77GF8 [3]	RnCPU	○	×	○	○	○	○	×	×	×	×	×	×
		RD77GF16 [3]	RnCPU	○	×	○	○	○	○	×	×	×	×	×	×
		RD77GF32	RnCPU	○	×	○	○	○	○	×	×	×	×	×	×
		QD77GF4 [4]	QnCPU	○	○	○	×	○	○	×	×	○	○	○	×
		QD77GF8 [4]	QnCPU	○	○	○	×	○	○	×	×	○	○	○	×
		QD77GF16 [4]	QnCPU	○	○	○	×	○	○	×	×	○	○	○	×
		RJ71EN71	RnCPU	○	×	○	○	○	○	×	×	×	×	×	×
		RJ71GF11-T2	RnCPU	○	×	○	○	○	○	×	×	×	×	×	×
		QJ71GF11-T2 [5]	QnCPU	○	○	○	×	○	○	×	×	○	○	○	×
		LJ71GF11-T2 [5]	LnCPU	○	×	○	×	×	○	×	×	×	×	×	×

*1 Connect the GOT as a CC-Link intelligent device station.
*2 Only supports the case where MELSECNET/H is used in the MELSECNET/10 mode. Connection to the remote I/O network is not allowed.
*3 To use the motion mode, use a module with the firmware version 1 or later; to use the I/O mode, use a module with the firmware version 2 or later.
*4 To use the I/O mode, use a module with the upper five digits of the serial No. later than 18022.
*5 Use a module with the upper five digits of the serial No. later than 14102. Motion mode is not supported.
*6 GT23 supports connection using Ethernet connection, direct CPU connection, serial communication connection, or CC-Link connection (via G4).
*7 GT21 and GS21 support connection using Ethernet connection.
*8 Not connectable from the GOT in the same network.

◆ Mitsubishi Electric robot controllers

Series	Controller name	GT27/GT25/GT23/GT21/GS21 [5]											
		Ethernet connection	Direct CPU connection	Serial communication connection	CC-Link IE TSN connection	CC-Link IE Controller Network connection	CC-Link IE Field Network connection	CC-Link connection (intelligent device station) [1]	CC-Link connection (via G4)	Bus connection	MELSECNET/H connection	MELSECNET/10 connection [2]	Multi-drop connection
F Series	CR750-Q (Q172DRCPU)	○ [3]	○ [4]	○	×	○	○	○	○	○	○	○	×
	CR751-Q (Q172DRCPU)	○ [3]	○ [4]	○	×	○	○	○	○	○	○	○	×
	CR750-D	○	×	×	×	×	×	×	×	×	×	×	×
	CR751-D	○	×	×	×	×	×	×	×	×	×	×	×
SQ Series	CRnQ-700 (Q172DRCPU)	○ [3]	○ [4]	○	×	○	○	○	○	○	○	○	×
SD Series	CRnD-700	○	×	×	×	×	×	×	×	×	×	×	×
FR Series	CR800-D	○ [6]	×	×	×	×	×	×	×	×	×	×	×
	CR800-R (R16RTCPU)	○	×	○	×	○	○	○	×	×	×	×	×
	CR800-Q (Q172DSRCPU) NEW	○	○ [4]	○	×	○	○	○	○	○	○	○	×

*1 Connect the GOT as a CC-Link intelligent device station.
*2 Only supports the case where MELSECNET/H is used in the MELSECNET/10 mode. Connection to the remote I/O network is not allowed.
*3 The Display I/F of CRnQ-700, CR750/751-Q cannot be used. Ethernet connections can be established only via the Ethernet module (QJ71E71) or the built-in Ethernet port in the multiple CPU system (QnUDE).
*4 Access via the serial port (RS-232) of QCPU in the multiple CPU system since CRnQ-700, CR750/751-Q, and CR800-Q have no serial ports.
*5 GT23, GT21, and GS21 support connection using Ethernet connection, direct CPU connection, serial communication connection, or CC-Link connection (via G4).
*6 Ethernet connections can be established to the built-in LAN port of CR800-D.

For the details of the connection configuration, please refer to the GOT2000 Series Connection Manual.

◆ Mitsubishi Electric CNCs

Series	GT27/GT25/GT23 *6											
	Connection type											
	Ethernet connection	Direct CPU connection	Serial communication connection	CC-Link IE TSN connection	CC-Link IE Controller Network connection	CC-Link IE Field Network connection	CC-Link connection (intelligent device station) *1	CC-Link connection (via G4)	Bus connection	MELSECNET/H connection	MELSECNET/10 connection *2	Multi-drop connection
CNC C80 (R16NCCPU-S1)*7	○	×	○	×	○	○	○	×	×	×	×	×
CNC C70 (Q173NCCPU) *3	○	○ *4	○	×	○	○	○	○	○	○	○	×
CNC M700VS	×	×	×	×	×	×	○ *5	×	×	×	×	×
CNC M70V	×	×	×	×	×	×	○ *5	×	×	×	×	×
CNC M800/M80 NEW	×	×	×	×	×	×	○ *8 *9	×	×	×	×	×

*1　Connect the GOT as a CC-Link intelligent device station.

*2　Includes the connection where MELSECNET/H is used in the MELSECNET/10 mode. Connection to the remote I/O network is not allowed.

*3　When using a CNC C70, the CNC monitor function, the CNC data I/O function, and the CNC machining program edit function can be used in bus connection and Ethernet connection (Display I/F connection only). The above functions are supported by the GOT models of which resolution is SVGA or higher.

*4　Access via the serial port (RS-232) of QCPU in the multiple CPU system since CNC C70 has no serial port.

*5　Only cyclic transmission can be used. (CC-Link unit FCU7-HN746 can be used)

*6　GT23 supports connection using Ethernet connection, direct CPU connection, serial communication connection, or CC-Link connection (via G4).

*7　When using a CNC C80, the CNC monitor2 function can be used in Ethernet connection (Display I/F connection only).

*8　Only cyclic transmission can be used. (CC-Link unit FCU8-EX561(WN561) can be used)

*9　When using M800S/M80, connect FCU8-EX561(WN561) to the relay module for communication extension (FCU8-EX702, or FCU8-EX703).

◆ Mitsubishi Electric power monitoring products

Series	Model name	GT27/GT25/GT23/GT21/GS21 *2			
		RS-485	RS-422	RS-232	Multi-drop connection
Energy measuring unit EcoMonitorLight	EMU4-BD1-MB	○ (2-wire type *1)	×	×	×
	EMU4-HD1-MB	○ (2-wire type *1)	×	×	×
Energy measuring unit EcoMonitorPlus NEW	EMU4-BM1-MB	○ (2-wire type *1)	×	×	×
	EMU4-HM1-MB	○ (2-wire type *1)	×	×	×
	EMU4-LG1-MB	○ (2-wire type *1)	×	×	×
Electronic multi-measuring instrument	ME110SSR-MB	○ (2-wire type *1)	×	×	×
	ME96NSR-MB	○ (2-wire type *1)	×	×	×

*1　Only MODBUS®/RTU connection is supported. Use the MODBUS®/RTU master communication driver.

*2　Except GT2103-PMBDS2 and GT2103-PMBLS.

■ Applicable GOT models for each connection type

The GOT to be used differs depending on the connection type.

Model	Connection type	Applicable model	
GT27/GT25	RS-232	All models (Built-in interfaces of the GOT can be used.)	
	RS-422/485		
	Ethernet		
	CC-Link (via G4)		
	Other than above	GT27 all models GT25 models excluding some models (By mounting communication units on the GOT, bus connection, network connection, and others can be used. No communication units can be mounted on GT2510-WXTBD, GT2510-WXTSD, GT2507-WTBD, GT2507-WTSD, GT2507T-WTSD, GT2505-VTBD, GT2506HS-VTBD, and GT2505HS-VTBD.)	
GT23	RS-232	All models (Built-in interfaces of the GOT can be used.)	
	RS-422/485		
	Ethernet		
	CC-Link (via G4)		
GT21/GS21	RS-232	GT2107-WTBD GT2107-WTSD GT2104-RTBD GT2103-PMBDS	GT2103-PMBDS2 GS2110-WTBD GS2107-WTBD
	RS-422/485	GT2107-WTBD GT2107-WTSD GT2104-RTBD GT2103-PMBD	GT2103-PMBDS GT2103-PMBLS *1 GS2110-WTBD *2 GS2107-WTBD *2
	Ethernet	GT2107-WTBD GT2107-WTSD GT2104-RTBD	GT2103-PMBD GS2110-WTBD GS2107-WTBD
	CC-Link (via G4)	GT2107-WTBD GT2107-WTSD GT2104-RTBD GT2103-PMBD	GT2103-PMBDS GT2103-PMBDS2 GS2110-WTBD GS2107-WTBD

*1　Only connection with MELSEC iQ-F Series and MELSEC-F Series is supported.

*2　Only RS-422 is supported.

8

Specifications

Specifications

Connectable model list (GOT2000/GOT SIMPLE)

◆ Non-Mitsubishi programmable controllers/Motion controllers/Safety controllers

Manufacturer		Model name	GT27/GT25/GT23/GT21/GS21 [1]					
			Ethernet connection	Direct CPU connection RS-422	Direct CPU connection RS-232	Serial communication connection RS-422	Serial communication connection RS-232	EtherNet/IP connection
OMRON Corporation	SYSMAC CJ1	CJ1H, CJ1G, CJ1M	○	×	○	○ [4]		×
	SYSMAC CJ2	CJ2H	○	×	○	○ [4]		×
		CJ2M	○	×	○ [5]	○ [4]		×
	SYSMAC CPM	CPM1, CPM1A	×	×	×	×	○	×
		CPM2A	×	×	○	×	○	×
		CPM2C	×	×	×	×	○	×
	SYSMAC CQM1	CQM1	×	×	○ [8]	×	×	×
	SYSMAC CQM1H	CQM1H	×	×	○	×	×	×
	SYSMAC CP1	CP1H, CP1L	×	×	×	○	○	×
		CP1E (N type)	×	×	○ [6]	○ [6][7]	○ [6][7]	×
	SYSMAC CS1	CS1H, CS1G, CS1D [3]	○	×	○	○	○	×
	SYSMAC CVM1/CV [9]	CVM1-CPU11-V□, CVM1-CPU01-V□, CV500-CPU01-V□, CV1000-CPU01-V□, CV2000-CPU01-V□	×	○ [4]		×	×	×
	SYSMAC C200HS	C200HS	×	×	×	○	○	×
	SYSMAC C200H	C200H	×	×	×	○	○	×
	SYSMAC C1000H	C1000H	×	×	×	○ [4]		×
	SYSMAC C2000H	C2000H	×	×	×	○ [4]		×
	SYSMAC α	C200HX, C200HG, C200HE	×	×	○	○	○	×
	NJ	NJ501-□□□□, NJ101-□□□□, NJ301-□□□□	×	×	×	×	×	○
	NX NEW	NX1P2-□□□□□□□, NX102-□□□□, NX701-□□□□	×	×	×	×	×	○
KEYENCE CORPORATION	KV-7000	KV-7300	○	○	○	○	○	×
		KV-7500	○	×	×	○	○	×
	KV-5000	KV-5000, KV-5500	○	×	×	○	○	×
	KV-3000	KV-3000	○	×	×	○	○	×
	KV-1000	KV-1000	○	×	○	○	○	×
	KV-700	KV-700	○	×	○	○	○	×
	KV Nano	KV-N14□□	×	×	○	○	○	×
	KV Nano NEW	KV-N24□□, KV-N60□□, KV-N40□□, KV-NC32T	○	×	○	○	○	×
KOYO ELECTRONICS INDUSTRIES CO., LTD. [2]	DirectLOGIC 05 Series	D0-05AA, D0-05AD, D0-05AR, D0-05DA, D0-05DD, D0-05DD-D, D0-05DR, D0-05DR-D	×	×	○	○	○	×
	DirectLOGIC 06 Series	D0-06DD1, D0-06DD2, D0-06DR, D0-06DA, D0-06AR, D0-06AA, D0-06DD1-D, D0-06DD2-D, D0-06DR-D	×	○	○	○	○	×
	DirectLOGIC 205 Series	D2-240	×	×	○	○	○	×
		D2-250-1, D2-260	×	○	○	○	○	×
	KOSTAC SU Series	SU-5E, SU-6B, SU-5M, SU-6M	×	○	○	○	○	×
	PZ Series	PZ3	×	○	○	×	×	×
Sharp Corporation [2]		JW-21CU, JW-31CUH	×	×	×	○	×	×
		JW-22CU, JW-32CUH, JW-33CUH, JW-70CUH, JW-100CUH, JW-100CU	×	○ [4]		○	×	×
		Z-512J	×	○ [4]		×	×	×
JTEKT Corporation [2]	TOYOPUC Series	PC2JC-CPU, PC2J16P-CPU, PC2J16PR-CPU	×	×	○ [10]	○	○ [10]	×
		PC2J-CPU, PC2JS-CPU, PC2JR-CPU	×	×	×	○	○ [10]	×
		PC3JG-P-CPU, PC3JG-CPU	×	×	○ [10]	○	○ [10]	×
		PC3JD-CPU, PC3JD-C-CPU	×	×	○ [10]	○	○ [10]	×
		PC3J-CPU, PC3JL-CPU	×	○	○ [10]	○	○ [10]	×
TOSHIBA CORPORATION [2]	PROSEC T Series	T2 (PU224)	×	○	×	×	×	×
		T2E, T2N	×		○ [4]	×	×	×
		T3, T3H	×	○	×	×	×	×
	PROSEC V Series	model 2000 (S2E), model 2000 (S2T), model 2000 (S2), model 3000 (S3)	×	○	×	×	×	×
	Unified Controller nv Series	PU811	○	×	×	×	×	×
		PUM11 NEW, PUM12 NEW, PUM14 NEW	○	×	×	×	×	×
TOSHIBA MACHINE CO., LTD.	TCmini Series	TC3-01, TC3-02, TC6-00, TC8-00	×	×	○	×	×	×
		TC5-02, TC5-03	×	○ [20]	×	×	×	×
	Robot controller	TS2000, TS2100	×	×	○	×	×	×
HITACHI Industrial Equipment Systems Co., Ltd. [2]	Large-sized H Series	H-300, H-302, H-700, H-702, H-1002, H-2000, H-2002, H-4010	×	×	○	○ [4]		×
	H-200 to 252 Series	H-200, H-250, H-252, H-252B, H-252C	×	×	○	×	×	×
	H Series board type	HL-40DR, HL-64DR, H-20DR, H-20DT, H-28DR, H-28DT, H-40DR, H-40DT, H-64DR, H-64DT	×	×	○	×	×	×
	EH-150 Series	EH-CPU104, EH-CPU208, EH-CPU308, EH-CPU316, EH-CPU516, EH-CPU548	×	×	○	×	×	×
Hitachi Ltd. [2]	S10V	LQP510	×	○	×	○	○	×
		LQP520	×	×	×	○	○	×
	S10mini	LQP000, LQP010, LQP011, LQP120, LQP800	×	×	×	○	○	×
FUJI ELECTRIC CO., LTD. [2]	MICREX-F	F55, F120S, F140S, F70, F15□S	×	×	×	○	○	×
	MICREX-SX SPH	SPH200, SPH2000, SPH300, SPH3000	○	×	○	○	○	×

For the details of the connection configuration, please refer to the GOT2000 Series Connection Manual.

Manufacturer	Model name		Ethernet connection	Direct CPU connection		Serial communication connection		EtherNet/IP connection
				RS-422	RS-232	RS-422	RS-232	
Panasonic Industrial Devices SUNX Co., Ltd.	FP0R / FP0-C16CT / FP0-C32CT	FP1-C24C / FP1-C40C	×	×	○	×	×	×
	FP2 / FP2SH / FP3	FP5 / FP10 (S) / FP10SH	×	×	○	×	○	×
	FP-M (C20TC) / FP-M (C32TC)	FP Σ	×	×	○	×	×	×
	FP-X		×	×	○	○	○	×
	FP7		×	×	○	○	○	×
YASKAWA Electric Corporation	GL120	GL130	×	×	○ *2	○ *2	×	×
	GL60S / GL60H	GL70H	×	×	×	○ *2	○ *2	×
	CP-9200SH		○	×	×	×	○	×
	CP-9300MS		×	×	○ *2	×	×	×
	MP920		○	×	○	○	○	×
	MP930		×	×	○	×	×	×
	MP940		×	○	○	×	×	×
	PROGIC-8		×	×	○ *2	×	×	×
	CP-9200 (H)		×	×	○ *2	×	×	×
	CP-312		○	×	×	×	○	×
	CP-317		○	×	×	×	○	×
	MP2200 / MP2300	MP2300S	○	×	×	○	○	×
	MP3200	MP3300	○	×	×	×	×	×
Yokogawa Electric Corporation *2	FA500	FA500	×	×	×	○ *4	×	×
	FA-M3	F3SP05 / F3SP08	○	×	○	○	○	×
		F3SP10	×	×	×	×	○	×
		F3SP20 / F3SP30	×	×	×	○	○	×
		F3FP36	○	×	×	○	○	×
		F3SP21 / F3SP25 / F3SP28 / F3SP35 / F3SP38 / F3SP53 / F3SP58 / F3SP59	○	×	○	○	○	×
		F3SP66 / F3SP67	○	×	○	○	○	×
		F3SP22-0S	×	×	○	×	×	×
	FA-M3V	F3SP71-4N	○	×	×	×	×	×
		F3SP71-4S	○	×	×	○	○	×
		F3SP76-7S	○	×	×	×	○	×
	STARDOM	NFCP100 / NFJT100	○ *14	×	○	×	×	×
Allen-Bradley (Rockwell Automation, Inc.)	SLC500 Series *11	SLC500-20 / SLC500-30 / SLC500-40 / SLC5/01 / SLC5/02	×	×	○ *2	×	×	×
		SLC5/03 / SLC5/04 / SLC5/05	×	×	○	×	×	×
	MicroLogix1000 Series (digital CPU) *11 *12 *13	1761-L10BWA / 1761-L10BWB / 1761-L16AWA / 1761-L16BWA / 1761-L16BWB / 1761-L16BBB / 1761-L32AAA / 1761-L32AWA / 1761-L32BWA / 1761-L32BWB / 1761-L32BBB	○ *15	×	○	×	×	×
	MicroLogix1000 Series (analog CPU) *11	1761-L20AWA-5A / 1761-L20BWA-5A / 1761-L20BWB-5A	○ *15	×	○	×	×	×
	MicroLogix1100 Series *11	1763-L16BWA	○ *15	×	○	×	×	×
	MicroLogix1200 Series *11	1762-L24BWA	○ *15	×	○	×	×	×
	MicroLogix1400 Series *11	1766-L32AWA	○ *15	×	○	×	×	×
	MicroLogix1500 Series *11	1764-LSP / 1764-LRP NEW	○ *15	×	○	×	×	×
	ControlLogix Series	1756-L / 1756-L1M1 / 1756-L1M2 / 1756-L1M3	○ *15	×	○ *2	×	×	○ *21
		1756-L55M12 / 1756-L55M13 / 1756-L55M14 / 1756-L55M16 / 1756-L55M22 / 1756-L55M23 / 1756-L55M24	○ *15	×	○ *2	×	×	○ *21
		1756-L61 / 1756-L62 / 1756-L63 / 1756-L64	○ *15	×	○ *2	×	×	○ *21
		1756-L72S	○ *15	×	×	×	×	○ *21
		1756-L71 NEW / 1756-L72 NEW / 1756-L73 NEW / 1756-L74 NEW / 1756-L75 NEW	○ *15	×	×	×	×	○ *21
		1756-L81E NEW / 1756-L82E NEW / 1756-L83E NEW / 1756-L84E NEW / 1756-L85E NEW	○ *15	×	×	×	×	○ *21
	CompactLogix Series	1769-L31 / 1769-L32C / 1769-L35CR	×	×	○ *2	×	×	×
		1769-L32E / 1769-L35E	○ *15	×	○ *2	×	×	○ *21
	FlexLogix Series *2	1794-L33 / 1794-L34	×	×	○	×	×	○ *16

Specifications

Connectable model list (GOT2000/GOT SIMPLE)

◆ Non-Mitsubishi programmable controllers/Motion controllers/Safety controllers

Manufacturer		Model name		GT27/GT25/GT23/GT21/GS21 *1					
				Ethernet connection	Direct CPU connection		Serial communication connection		EtherNet/IP connection
					RS-422	RS-232	RS-422	RS-232	
GE Intelligent Platforms, Inc. *2	Series 90-30	IC693CPU311 IC693CPU313 IC693CPU323		×	×	×	○	○	×
		IC693CPU350 IC693CPU360 IC693CPU363	IC693CPU366 IC693CPU367 IC693CPU374	×	○	×	○	○	×
	Series 90-70	IC697CGR772 IC697CGR935 IC697CPM790 IC697CPU731 IC697CPU780 IC697CPU788 IC697CPU789	IC697CPX772 IC697CPX782 IC697CPX928 IC697CPX935	×	×	×	○	○	×
	VersaMax Micro	IC200UAA003		×	○	○	×	×	×
		IC200UAR014 IC200UDD104 IC200UDD112	IC200UDR001 IC200UDR002 IC200UDR003	×	×	○	×	×	×
		IC200UAA007 IC200UAL004 IC200UAL005 IC200UAL006 IC200UAR028 IC200UDD064 IC200UDD164 IC200UDD110	IC200UDD120 IC200UDD212 IC200UDR005 IC200UDR006 IC200UDR010 IC200UDR064 IC200UDR164	×	○	○	×	×	×
LS Industrial Systems Co., Ltd.	K300S	K4P-15AS		×	×	×	○	○	×
	K200S	K3P-07□S		×	×	×	○	○	×
	K120S	K7M-D□□□U		×	×	○	○	○	×
	K80S	K7M-D□□□S (/DC)		×	×	○	○	○	×
Mitsubishi Electric India Pvt. Ltd.	Nexgenie 2000 PLC	P2210 P2211	P2213A P2214	×	○	○	×	×	×
	Nexgenie 1000 PLC	NG14RL NG14RN NG16ADL NG16ADN	NG16DL NG16DN	×	○	○	×	×	×
Schneider Electric SA		Twido Series		○ *14	×	×	×	×	×
		Modicon Premium Series		○ *14	×	×	×	×	×
		Modicon Quantum Series		○ *14	×	×	×	×	×
SICK AG	Flexi Soft Series	FX3-CPU000000 FX3-CPU130002	FX3-CPU320002	×	×	○	×	×	×
Siemens AG		SIMATIC S7-200 Series		○ *17	×	○	×	×	×
		SIMATIC S7-300 Series		○ *19	×	○	×	×	×
		SIMATIC S7-400 Series		○ *19	×	○	×	×	×
		SIMATIC S7-1200 Series		○ *17	×	×	×	×	×
SMC Corporation		LECA6	LECP6	×	○ *18	×	×	×	×

*1 Select an appropriate GT21 model depending on the connection type. For the details of applicable GOT models for each connection type, please refer to page 164.
*2 GT21 and GS21 cannot be connected.
*3 Connectable only when a single communication unit is used in a single CPU system.
*4 Either RS-422 or RS-232 can be selected.
*5 Only CJ2M-CPU1□ can be connected.
*6 Connection is not available with the E type CP1E.
*7 For CP1E (N type) CPU modules with 20 or less I/O points, only the direct CPU connection is available.
*8 The CQM1-CPU11 is unable to communicate with GOT since the CQM1-CPU11 has no RS-232 interface.
*9 SYSMAC CVM1/CV can be used with a CPU version 1 or later.
*10 An RS-232/RS-422 interface converter (TXU-2051) is required.
*11 Connection to DH485 network is available via adapter (1770-KF3).
*12 DH485 connection can be used with a CPU in the series C or later. (DH485 protocol is not supported by a CPU in the series B or earlier.)

*13 One-to-one connection is supported by a CPU in the series D or later. (DF1 half duplex is not supported by a CPU in the series C or earlier.)
*14 Only MODBUS®/TCP connection is supported. Use the MODBUS®/TCP master communication driver.
*15 EtherNet/IP (PCCC protocol) is supported.
*16 Use EtherNet/IP Tag.
*17 Only OP communication can be used in Ethernet connection of the S7-200 Series and the S7-1200 Series.
*18 Only MODBUS®/RTU connection is supported. Use the MODBUS®/RTU master communication driver.
*19 Only OP communication can be used on GT21 and GS21.
*20 Only RS-485 is supported.
*21 GT21 and GS21 do not support EtherNet/IP Tag.

■ Modules usable when connected with non-Mitsubishi controllers in serial communication connection, Ethernet connection, EtherNet/IP connection

Manufacturer		Ethernet	RS-422	RS-232	EtherNet/IP
OMRON Corporation	Host link unit Communication unit Communication board Ethernet module	CJ1W-EIP21 CJ1W-ETN21 CS1D-ETN21D CS1W-EIP21 CS1W-ETN21	CJ1W-SCU31-V1 CJ1W-SCU41(-V1) CP1W-CIF11 CP1W-CIF12 CQM1-SCB41 CS1W-SCB41(-V1) C200H-LK202-V1 C200HW-COM03 C200HW-COM06 C500-LK201-V1	CJ1W-SCU21(-V1) CJ1W-SCU41(-V1) CPM1-CIF01 CPM2C-CIF01-V1 CP1W-CIF01 CQM1-CIF02 CQM1-SCB41 CS1W-SCB21(-V1) CS1W-SCB41(-V1) CS1W-SCU21(-V1) C200HW-COM02 C200HW-COM05 C200HW-COM06 C200H-LK201-V1 C500-LK201-V1	CJ1W-EIP21
KEYENCE CORPORATION	Multi-communication unit Ethernet module	KV-LE20V KV-LE21V KV-EP21V KV-NC1EP *3 NEW	KV-L20 KV-L20R KV-L20V KV-NC20L NEW KV-N11L NEW	KV-L20 KV-L20R KV-L20V KV-NC10L NEW KV-NC20L NEW KV-N10L NEW	—
KOYO ELECTRONICS INDUSTRIES CO., LTD.	Data communications module Host link module	—	D0-DCM D2-DCM U-01DM	D0-DCM D2-DCM U-01DM	
Sharp Corporation	Link unit	—	JW-10CM JW-21CM ZW-10CM	—	
JTEKT Corporation	Link unit	—	THU-2755 THU-2927 THU-5139	—	
Hitachi Industrial Equipment Systems Co., Ltd.	Intelligent serial port module	—	COMM-H COMM-2H	COMM-H COMM-2H	—

Specifications

For the details of the connection configuration, please refer to the GOT2000 Series Connection Manual.

Manufacturer		Ethernet	RS-422	RS-232	EtherNet/IP
Hitachi, Ltd.	Communication module	—	LQE165 LQE565	LQE060 LQE160 LQE560	—
FUJI ELECTRIC CO., LTD.	RS-232C interface card	—	—	NV1L-RS2	—
	RS-232C/485 interface capsule		FFK120A-C10	FFK120A-C10	
	General-purpose interface module Communication module		FFU120B NC1L-RS4	FFU120B NC1L-RS2	
			NP1L-RS1 NP1L-RS2 NP1L-RS3	NP1L-RS1 NP1L-RS4 NP1L-RS5	
	Ethernet interface module	NP1L-ET1	—	—	
Panasonic Industrial Devices SUNX Co., Ltd.	Computer communication unit Communication cassette	—	AFPX-COM3 AFP7CCM1 AFP7CCM2 AFP7CCS1M1	AFPG801 AFPG802 AFPX-COM1 AFPX-COM2 AFPX-COM4 AFP2462 AFP3462 AFP5462 AFP7CCS1 AFP7CCS2 AFP7CCS1M1 AFP0HCCS1 NEW AFP0HCCS2 NEW AFP0HCCS1M1 NEW	—
YASKAWA Electric Corporation	MEMOBUS module Communication module	CP-218IF 218IF 218IF-01 218IF-02 *1 218TXB	JAMSC-IF612 JAMSC-120NOM27100 217IF 217IF-01	CP-217IF JAMSC-IF60 JAMSC-IF61 217IF 217IF-01 218IF-01 218IF-02 *1	—
Yokogawa Electric Corporation	PC link module Ethernet interface module	F3LE01-5T F3LE11-0T F3LE12-0T	F3LC11-2N F3LC11-2F LC02-0N	F3LC01-1N F3LC11-1F F3LC11-1N F3LC12-1F LC01-0N LC02-0N	—
Allen-Bradley (Rockwell Automation, Inc.)	EtherNet/IP communication module	1756-ENBT 1756-ENET 1756-EN2T NEW 1756-EN2TR 1756-EN3TR NEW 1756-EN2TSC NEW 1761-NET-ENI NEW	—	—	1756-ENBT 1756-ENET *2 1756-EN2T 1756-EN2TR 1756-EN3TR NEW 1756-EN2TSC NEW 1788-ENBT/A
GE Intelligent Platforms, Inc.	Communication module	—	IC693CMM311 IC697CMM711	IC693CMM311 IC697CMM711	—
LS Industrial Systems Co., Ltd.	Cnet I/F unit	—	G7L-CUEC	G7L-CUEB	—
	Cnet I/F module	—	G4L-CUEA G6L-CUEC	G4L-CUEA G6L-CUEB	—
Schneider Electric SA	Ethernet module	TSX ETY 4102 TSX ETY 5102 140 NOE 771 00 140 NOE 771 10 140 NWM 100 00	—	—	—
Siemens AG	Ethernet module	CP 243-1 CP 243-1 IT CP 343-1 CP 343-1 Advanced CP 343-1 Advanced-IT CP 343-1 IT CP 343-1 Lean CP 443-1 CP 443-1 IT CP 443-1 Advanced-IT	—	—	—

*1 When connecting MP2200, MP2300, or MP2300S using Ethernet connection or RS-232 connection, use a CPU of the software version 2.60 or later.

*2 Use an EtherNet/IP communication module 1756-ENET of the version B or later.

*3 When using KV-24□□, 40□□, or 60□□, a connection conversion unit (KV-N1) is required.

◆ Servo amplifiers

Manufacturer	Model name	GT27/GT25/GT23	
		RS-485	RS-232
Panasonic Corporation	MINAS A4 Series	○	○
	MINAS A4F Series	○	○
	MINAS A4L Series	○	○
	MINAS A5 Series	○	○

Specifications

Connectable model list (GOT2000/GOT SIMPLE)

◆ Robot controllers

Manufacturer		Model name		GT27/GT25/GT23/GT21/GS21	
				RS-422	RS-232
IAI Corporation X-SEL controller	ROBO CYLINDER RCA Series dedicated program controller	ASEL	ASEL	×	○
	ROBO CYLINDER RCP2 Series dedicated program controller	PSEL	PSEL	×	○
	Single-axis robot/linear servo/ ROBO CYLINDER RCS2 program controller	SSEL	SSEL	×	○
	Single-axis, multi-axis robot controller	X-SEL	XSEL-J XSEL-KT XSEL-K XSEL-P XSEL-KE XSEL-Q XSEL-KET	×	○
	SCARA robot controller	X-SEL	XSEL-JX XSEL-PX XSEL-KTX XSEL-QX XSEL-KX	×	○
IAI Corporation ROBO CYLINDER	RCA2/RCA Series positioner controller	ACON	ACON-C ACON-PL ACON-CG ACON-PO ACON-CY ACON-SE	○	○
	ERC2 built-in positioner controller	ERC2	ERC2	○	○
	RCP3/RCP2 Series positioner controller	PCON	PCON-C PCON-CY PCON-CA *1 PCON-PL PCON-CF PCON-PO PCON-CFA *1 PCON-SE PCON-CG	○	○
	RCS2 Series positioner controller	SCON	SCON-C SCON-CA	○	○
TOSHIBA MACHINE CO., LTD.	SCARA robot controller	TS2000 TS2100		×	○

*1 Use PCON-CA or PCON-CFA of V0002 or later.

◆ Temperature controllers/Other control equipment

Manufacturer		Model name		GT27/GT25/GT23/GT21/GS21			
				RS-485	RS-422	RS-232	Ethernet
Azbil Corporation	AHC2001	AHC2001		○ (4-wire type *11)	×	○	×
	AUR	AUR350C AUR450C		○ (2-wire type *1)	×	○ *2	×
	CMC	CMC10B		○ (4-wire type)	×	○ *2	×
	CMF	CMF015		○ (2-wire type *1)	×	○ *2	×
		CMF050		○ (2-wire type *1/4-wire type)	×	○ *2	×
	CML	CML		○ (2-wire type *1/4-wire type)	×	○ *2	×
	CMS	CMS		○ (2-wire type *1)	×	○ *2	×
	DMC	DMC10		○ (2-wire type *1)	×	○ *2	×
		DMC50		○ (2-wire type *1/4-wire type)	×	×	×
	MPC	MPC		○ (2-wire type *1)	×	○ *2	×
	MQV	MQV		○ (2-wire type *1)	×	○ *2	×
	MVF	MVF		○ (2-wire type *1)	×	○ *2	×
	NX	NX-D15 NX-D35 NX-D25		○ (2-wire type *1 *9)	×	×	○ *10
		NX-DX1 NX-DY1 NX-DX2 NX-DY2		○ (2-wire type *1 *9)	×	×	○ *10
		NX-S01 NX-S12 NX-S11 NX-S21		○ (2-wire type *1 *9)	×	×	○ *10
	SDC	SDC15 SDC35 SDC25 SDC36 SDC26		○ (2-wire type *1)	×	○ *2	×
		SDC45 SDC46		○ (2-wire type *1)	×	○ *2	×
		SDC20 SDC40A SDC21 SDC40B SDC30 SDC40G SDC31		○ (2-wire type *1/4-wire type)	×	○ *2	×
	PBZ	PBC201-VN2		○ (2-wire type *1/4-wire type)	×	○ *2	×
	RX	RX		○ (2-wire type *1)	×	○ *2	×
OMRON Corporation	INPANEL NEO	E5ZN		○ (2-wire type *1)	×	○ *2	×
	THERMAC NEO	E5AN E5CN E5EN E5GN		○ (2-wire type *1)	×	○ *2	×
		E5AN-H E5EN-H E5AN-HT E5EN-HT		○ (2-wire type *1)	○	○ *2	×
		E5CN-H E5CN-HT		○ (2-wire type *1)	×	○ *2	×
	E5□C Series	E5AC E5EC E5CC E5GC E5DC		○ (2-wire type *1)	×	○ *2	×
		E5CC-B E5EC-B		○ (2-wire type *1)	×	○ *2	×
		E5AC-T E5EC-T E5CC-T		○ (2-wire type *1)	×	○ *2	×
	E5□D Series **NEW**	E5CD E5ED E5CD-B E5ED-B		○ (2-wire type *1)	×	○ *2	×
	THERMAC R	E5AR E5ER E5AR-T E5ER-T		○ (2-wire type *1)	×	○ *2	×
Shinko Technos Co., Ltd. *12	ACS-13A Series	ACS-13A-□/□,□,C5 *8		○ (2-wire type *1)	×	○ *2	×
	DCL-33A Series	DCL-33A-□/M,C5 *8		○ (2-wire type *1)	×	○ *2	×
	JC Series	JCD-33A-□/□□,C5 *8 JCR-33A-□/□□,C5 *8 JCS-33A-□/□□,C5 *8		○ (2-wire type *1)	×	○ *2	×
	JCM-33A Series	JCM-33A-□/□,□,C5 *8		○ (2-wire type *1)	×	○ *2	×
	FCR-100 Series	FCR-13A-□/M,C FCR-15A-□/M,C		×	×	○ *4	×
	FCD-100 Series	FCD-13A-□/M,C FCD-15A-□/M,C		×	×	○ *4	×
	FCR-23A Series	FCR-23A-□/M,C		×	×	○ *4	×

For the details of the connection configuration, please refer to the GOT2000 Series Connection Manual.

Manufacturer		Model name		GT27/GT25/GT23/GT21/GS21			
				RS-485	RS-422	RS-232	Ethernet
Shinko Technos Co., Ltd. *12	PC-900 Series	PC935-□/M,C		×	×	○ *4	×
		PC935-□/M,C5 *8		○ (2-wire type *1)			
		PC955-□/M,C		×			
		PC955-□/M,C5 *8		○ (2-wire type *1)			
	PCD-300 Series	PCD-33A-□/M,C5 *8		○ (2-wire type *1)	×	○ *4	×
	FIR Series	FIR-201-M,C		×	×	○ *4	×
	JIR-301-M Series	JIR-301-M□,C5 *8		○ (2-wire type *1)	×	○ *2	×
CHINO CORPORATION *12	AH3000 Series	AH3000		○ (2-wire type *1)	○	○	×
	AL3000 Series	AL3000		○ (2-wire type *1)	○	○	×
	DB1000 Series	DB1000		○ (2-wire type *1)	○	○	×
	DB2000 Series	DB2000		○ (2-wire type *1)	○	○	×
	DZ1000 Series	DZ1000 *7		○ (2-wire type *1)	○	○	×
	DZ2000 Series	DZ2000 *7		○ (2-wire type *1)	○	○	×
	GT120 Series	GT120		○ (2-wire type *1)	×	○ *2	×
	JU Series	JU		○ (2-wire type *1)	○	×	×
	KE Series	KE3000		○ (2-wire type *1)	○	×	×
	KP Series	KP1000	KP2000	○ (2-wire type *1)	○	○	×
	LE5000 Series	LE5000		○ (2-wire type *1)	○	×	×
	LT230 Series	LT230		○ (2-wire type *1)	×	○ *2	×
	LT300 Series	LT350	LT370	○ (2-wire type *1)	○	○	×
	LT400 Series	LT450	LT470	○ (2-wire type *1)	○	○	×
	LT830 Series	LT830		○ (2-wire type *1)	×	○ *2	×
	SE3000 Series	SE3000		○ (2-wire type *1)	○	○	×
FUJI ELECTRIC CO., LTD.	Temperature controller	PXF [NEW] PXG PXR	PXF4/5/9 [NEW] PXG4/5/9 PXR3/4/5/9	○ (2-wire type *1)	×	○ *2	×
	Digital controller	PXH	PXH9	○ (2-wire type *1)	×	○ *2	×
	Multi-loop module type temperature controller [NEW]	PUM	PUMA/B	○ (2-wire type *1)	×	○ *2	×
Yokogawa Electric Corporation *12	GREEN Series (UM)	UM330 UM331	UM350 UM351	○ (2-wire type *1)	×	○ *2	×
	GREEN Series (UP)	UP350 UP351	UP550	○ (2-wire type *1/4-wire type)	×	○ *2	×
		UP750		○ (2-wire type *1)	×	○ *2	×
	GREEN Series (US)	US1000		○ (2-wire type *1)	×	○ *2	×
	GREEN Series (UT)	UT320 UT321 UT350 UT351 UT420	UT450 UT520 UT550 UT551	○ (2-wire type *1/4-wire type)	×	○ *2	×
		UT750		○ (2-wire type *1)	×	○ *2	×
	UT100 Series (UP)	UP150		○ (2-wire type *1)	×	○ *2	×
	UT100 Series (UT)	UT130 UT150	UT152 UT155	○ (2-wire type *1)	×	○ *2	×
	UT2000 Series	UT2400	UT2800	○ (4-wire type)	×	○ *2	×
	UTAdvanced Series (UM)	UM33A		○ (2-wire type *1/4-wire type)	×	○ *2	○ *10
	UTAdvanced Series (UP)	UP35A	UP55A	○ (2-wire type *1/4-wire type)	×	○ *2	○ *10
		UP32A [NEW]		○ (2-wire type *1/4-wire type)	×	○ *2	×
	UTAdvanced Series (UT)	UT32A UT35A	UT55A UT75A	○ (2-wire type *1/4-wire type)	×	○ *2	○ *10
		UT52A		○ (2-wire type *1)			
RKC INSTRUMENT INC. *12	SR Mini HG	H-PCP-J		○ (2-wire type *1)	○	○	×
		H-PCP-A	H-PCP-B *7	×	○	○	×
	SRZ	Z-CT Z-DIO Z-TIO		○ (2-wire type *1 *6)	○ *5	○ *2 *3	○ *10
	CB *7	CB100 CB400 CB500	CB700 CB900	○ (2-wire type *1)	×	○ *2	×
	FB	FB100		○ (2-wire type *1/4-wire type)	×	○ *2	○ *10
		FB400	FB900	○ (2-wire type *1/4-wire type)	○	○ *2 *3	○ *10
	RB	RB100 RB400 RB500	RB700 RB900	○ (2-wire type *1)	×	○ *2	×
	PF	PF900	PF901	○ (2-wire type *1/4-wire type)	○	○ *2 *3	×
	HA	HA400 HA401	HA900 HA901	○ (2-wire type *1/4-wire type)	○	○	×
	RMC	RMC500		○ (2-wire type *1)	×	○ *2	×
	MA	MA900	MA901	○ (2-wire type *1/4-wire type)	○	○	×
	AG	AG500		○ (2-wire type *1/4-wire type)	○	×	×
	THV	THV-A1		○ (2-wire type *1/4-wire type)	○	×	×
	SA	SA100	SA200	○ (2-wire type *1)	×	○ *2	×
	SRX	X-TIO		○ (2-wire type *1)	×	○ *2	×
	SB1	SB1		○ (2-wire type *1)	×	○ *2	×
	B400	B400		○ (2-wire type *1)	○	×	×
	FZ	FZ110		○ (2-wire type *1)	×	○ *2	×
		FZ400	FZ900	○ (2-wire type *1)	○	○ *2 *3	×
	RZ	RZ100	RZ400	○ (2-wire type *1)	×	○ *2	×
	SRJ [NEW]	J-TI-A	J-TI-B	○ (2-wire type *1)	×	○ *2	×

*1 GT27/GT25: Use RS-422/485 interface, GT15-RS4-TE, or FA-LTBGT2R4CBL□. GT15-RS4-9S cannot be used.
*2 If the temperature controller/indicating controller has an RS-485 interface, use an RS-232/RS-485 converter for the manufacturer.
*3 If the temperature controller/indicating controller has an RS-422 interface, use an RS-232/RS-422 converter for the manufacturer.
*4 Only the indicating controller equipped with RS-232 communication function can be connected.
*5 Use a communication extension module (Z-COM).
*6 Use a communication extension module (Z-COM) depending on the system configuration of the temperature controller.

*7 Select a model that supports the MODBUS® communication function.
*8 Connectable with the products manufactured in October 2007 or later (Indicating controllers with the serial numbers 07Axxxxxx, 07Kxxxxxx, and 07Xxxxxxx or later).
*9 Only MODBUS®/RTU connection is supported. Use the MODBUS®/RTU master communication driver.
*10 Only MODBUS®/TCP connection is supported. Use the MODBUS®/TCP master communication driver.
*11 Use a serial communication unit SCU.
*12 GT21 and GS21 cannot be connected.

Specifications

Connectable model list (GOT2000/GOT SIMPLE)

◆ MODBUS® devices

Communication with MODBUS® compatible devices is possible by using the MODBUS®/RTU master or MODBUS®/RTU slave communication driver, or the MODBUS®/TCP master or MODBUS®/TCP slave communication driver.

For the MODBUS® devices, which have been checked for operation, please refer to the Technical Bulletin "List of Valid Devices Applicable for GOT2000 Series MODBUS® Connection" (No. GOT-A-0070) on the Mitsubishi Electric Factory Automation Global website.

◆ PROFIBUS DP devices

Communication with PROFIBUS DP-compliant devices is possible by using the PROFIBUS DP communication driver. (GT27, GT25 only)

For the PROFIBUS DP-compliant devices, please refer to the Technical Bulletin "List of PROFIBUS DP-compliant Equipment Validated to Operate with the GOT2000 Series" (No. GOT-A-0083) on the Mitsubishi Electric Factory Automation Global website.

◆ DeviceNet devices

Communication with DeviceNet-compliant devices is possible by using the DeviceNet communication driver. (GT27, GT25 only)

For the DeviceNet-compliant devices, please refer to the Technical Bulletin "List of DeviceNet-compliant Equipment Validated to Operate with the GOT2000 Series" (No. GOT-A-0084) on the Mitsubishi Electric Factory Automation Global website.

◆ Microcomputer connection

By connecting a personal computer, microcomputer board, programmable controller, etc. to a GOT, the data can be written to or read from virtual devices of the GOT.

◆ SLMP devices

Communication with SLMP compatible devices is possible by using the SLMP communication driver.

For the SLMP devices, which have been checked for operation, please refer to the Technical Bulletin "List of SLMP-compatible Equipment Validated to Operate with the GOT2000 Series" (No. GOT-A-0085) on the Mitsubishi Electric Factory Automation Global website.

◆ CC-Link IE Field Network Basic-compatible devices

Communication with CC-Link IE Field Network Basic-compatible devices is possible by using the Ethernet (CC-Link IE Field Network Basic) communication driver.

The GOT2000 Series operates as a slave station and is connectable to CC-Link IE Field Network Basic-compatible devices that operate as master stations.

For the CC-Link IE Field Network Basic-compatible devices, please refer to the Technical Bulletin "List of CC-Link IE Field Network Basic-compatible Equipment Validated to Operate with the GOT2000 Series" (No. GOT-A-0104) on the Mitsubishi Electric Factory Automation Global website.

■ Applicable GOT models for each connection type

The GOT to be used differs depending on the connection type.

Model	Connection type	Applicable model	
GT27/GT25	RS-232	All models (Built-in interfaces of the GOT can be used.)	
	RS-422/485		
	Ethernet		
	CC-Link (via G4)		
	Other than above	GT27 all models GT25 models excluding some models (By mounting communication units on the GOT, bus connection, network connection, and others can be used. No communication units can be mounted on GT2510-WXTBD, GT2510-WXTSD, GT2507-WTBD, GT2507-WTSD, GT2507T-WTSD, GT2505-VTBD, GT2506HS-VTBD, and GT2505HS-VTBD.)	
GT23	RS-232	All models (Built-in interfaces of the GOT can be used.)	
	RS-422/485		
	Ethernet		
	CC-Link (via G4)		
GT21/GS21	RS-232	GT2107-WTBD GT2107-WTSD GT2104-RTBD GT2103-PMBDS	GT2103-PMBDS2 GS2110-WTBD GS2107-WTBD
	RS-422/485	GT2107-WTBD GT2107-WTSD GT2104-RTBD GT2103-PMBD	GT2103-PMBDS GT2103-PMBLS *1 GS2110-WTBD *2 GS2107-WTBD *2
	Ethernet	GT2107-WTBD GT2107-WTSD GT2104-RTBD	GT2103-PMBD GS2110-WTBD GS2107-WTBD
	CC-Link (via G4)	GT2107-WTBD GT2107-WTSD GT2104-RTBD GT2103-PMBD	GT2103-PMBDS GT2103-PMBDS2 GS2110-WTBD GS2107-WTBD

*1   Only connection with MELSEC iQ-F Series and MELSEC-F Series is supported.
*2   Only RS-422 is supported.

Connectable model list (GT SoftGOT2000 Version1)

◆ Mitsubishi Electric programmable controllers/C Controller modules/Safety controllers/Motion controllers

Series		Model name	Ethernet connection Single	Ethernet connection Multi NEW	Direct CPU connection RS-232	Direct CPU connection USB NEW	Serial communication connection	CC-Link IE TSN connection	CC-Link IE Controller Network connection	CC-Link IE Field Network connection	MELSEC NET/H connection	MELSEC NET/10 connection *1
Programmable controller	MELSEC iQ-R Series	R00CPU NEW / R01CPU NEW / R02CPU NEW / R04CPU / R08CPU / R16CPU / R32CPU / R120CPU / R04ENCPU / R08ENCPU / R16ENCPU / R32ENCPU / R120ENCPU	○	○	×	○	○	×	○	○	×	×
	Safety CPU	R08SFCPU *27 / R16SFCPU *27 / R32SFCPU *27 / R120SFCPU *27	○	○	×	○	○	×	○	○	×	×
	Process CPU	R08PCPU*28 / R16PCPU*28 / R32PCPU*28 / R120PCPU*28	○	○	×	○	○	×	○	○ *29	×	×
	Process CPU	R08PSFCPU*30 NEW / R16PSFCPU*30 NEW / R32PSFCPU*30 NEW / R120PSFCPU*30 NEW	○	○	×	○	×	×	○	○ *29	×	×
	MELSEC-Q Series (Q mode) — High-speed universal model QCPU	Q03UDVCPU / Q04UDVCPU / Q06UDVCPU / Q13UDVCPU / Q26UDVCPU	○ *23	○ *23	○ *18	○	○	×	○ *2	○ *4	○ *23	○ *23
	Universal model QCPU	Q00UJCPU / Q00UCPU / Q01UCPU	○ *23	○ *23	○	○	○	×	○ *2	○ *4	○ *23	○ *23
	Universal model QCPU	Q02UCPU / Q03UDCPU	○ *23	○ *23	○	○	○	×	○ *3	○ *4	○ *23	○ *23
	Universal model QCPU	Q04UDHCPU / Q06UDHCPU / Q10UDHCPU / Q13UDHCPU / Q20UDHCPU / Q26UDHCPU	○ *23	○ *23	○	○	○	×	○ *2	○ *4	○ *23	○ *23
	Universal model QCPU — Built-in Ethernet type	Q03UDECPU	○ *23	○ *23	○ *18	○	○	×	○ *3	○ *4	○ *23	○ *23
	Universal model QCPU — Built-in Ethernet type	Q04UDEHCPU / Q06UDEHCPU / Q10UDEHCPU / Q13UDEHCPU / Q20UDEHCPU / Q26UDEHCPU / Q50UDEHCPU / Q100UDEHCPU	○ *23	○ *23	○ *18	○	○	×	○ *2	○ *4	○ *23	○ *23
	Basic model QCPU	Q00JCPU / Q00CPU *6 / Q01CPU *6	○ *23	○ *23	○	×	○	×	○ *5	×	○ *23	○ *23
	High performance model QCPU	Q02CPU *6	○ *23	○ *23	○	×	○	×	○ *7	×	○ *23	○ *23
	High performance model QCPU	Q02HCPU *6 / Q06HCPU *6 / Q12HCPU *6 / Q25HCPU *6	○ *23	○ *23	○	○	○	×	○ *7	×	○ *23	○ *23
	Process CPU	Q02PHCPU / Q06PHCPU	○ *23	○ *23	○	○	○	×	○ *8	×	○ *23	○ *23
	Process CPU	Q12PHCPU / Q25PHCPU	○ *23	○ *23	○	○	○	×	○ *9	×	○ *23	○ *23
	Redundant CPU (main base)	Q12PRHCPU / Q25PRHCPU	○	○	○	○	×	×	○ *9	×	○ *10	○ *10
	Redundant CPU (extension base)	Q12PRHCPU / Q25PRHCPU	○	○	×	×	○	×	×	×	×	×
	MELSEC-QS Series	QS001CPU	○	○	×	○ *11	×	×	○ *12	○ *13	○	○
	MELSEC-L Series	L02SCPU / L02SCPU-P	○ *14 *15	○ *14 *15	○	○	○	×	×	○ *16	×	×
	MELSEC-L Series	L02CPU / L02CPU-P / L06CPU / L06CPU-P / L26CPU / L26CPU-P / L26CPU-BT / L26CPU-PBT	○ *14	○ *14	○ *17	○	○	×	×	○ *16	×	×
	MELSEC iQ-F Series	FX5U / FX5UC	○	○	○	×	×	×	×	×	×	×
	MELSEC iQ-F Series	FX5UJ NEW	○	○	○	○	×	×	×	×	×	×

• There are two ways of usage of GT SoftGOT2000: GT SoftGOT2000 for single channel connection and GT SoftGOT2000 (Multi-channel) for multi-channel connection. GT SoftGOT2000 (Multi-channel) supports Ethernet connection, connection to OPC UA servers, or connection to microcomputers. Therefore in the following list, Ethernet connection column is separated in two columns: Single (GT SoftGOT2000) and Multi (GT SoftGOT2000 (Multi-channel)). For connection with OPC UA servers or microcomputers, please refer to page 170.
• For the details of the connection configuration, please refer to the GT SoftGOT2000 Version1 Operating Manual.

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Specifications

Specifications

- There are two ways of usage of GT SoftGOT2000: GT SoftGOT2000 for single channel connection and GT SoftGOT2000 (Multi-channel) for multi-channel connection. GT SoftGOT2000 (Multi-channel) supports Ethernet connection, connection to OPC UA servers, or connection to microcomputers. Therefore in the following list, Ethernet connection column is separated in two columns: Single (GT SoftGOT2000) and Multi (GT SoftGOT2000 (Multi-channel)). For connection with OPC UA servers or microcomputers, please refer to page 170.
- For the details of the connection configuration, please refer to the GT SoftGOT2000 Version1 Operating Manual.

Series		Model name	Ethernet connection		Direct CPU connection		Serial communication connection	CC-Link IE TSN connection	CC-Link IE Controller Network connection	CC-Link IE Field Network connection	MELSEC NET/H connection	MELSEC NET/10 connection [1]
			Single	Multi NEW	RS-232	USB						
Programmable controller	MELSEC-F Series	FX0	×	×	○	×	×	×	×	×	×	×
		FX0S										
		FX0N										
		FX1	×	×	○	×	×	×	×	×	×	×
		FX1S										
		FX1N										
		FX1NC										
		FX2	×	×	○	×	×	×	×	×	×	×
		FX2C										
		FX2N										
		FX2NC										
		FX3G	○	○ [31]	○	○	×	×	×	×	×	×
		FX3GC										
		FX3U	○	○ [31]	○	○	×	×	×	×	×	×
		FX3UC										
		FX3S										
		FX3GE										
Controller module	MELSEC iQ-R Series	R12CCPU-V	○ [25]	○ [25]	×	○ [26]	○ [19]	×	○	○	×	×
	MELSEC-Q Series	Q24DHCCPU-V	○	○	○ [18]		○ [19]	×	○ [2]	○	○	○
		Q24DHCCPU-VG										
		Q24DHCCPU-LS										
		Q26DHCCPU-LS										
		Q12DCCPU-V [20]										
Safety controller	MELSEC-WS Series	WS0-CPU0	×	×	×	×	×	×	×	×	×	×
		WS0-CPU1										
		WS0-CPU3										
Motion controller	MELSEC iQ-R Series	R16MTCPU	○	○	×	○	○	×	○	○	×	×
		R32MTCPU										
		R64MTCPU										
	MELSEC-Q Series	Q172CPU Discontinued	×	×	×	×	×	×	×	×	×	×
		Q173CPU Discontinued										
		Q172CPUN Discontinued	×	×	×	×	×	×	×	×	×	×
		Q173CPUN Discontinued										
		Q172HCPU Discontinued	×	×	×	×	×	×	×	×	×	×
		Q173HCPU Discontinued										
		Q172DCPU	×	×	×	×	×	×	×	×	×	×
		Q173DCPU										
		Q172DCPU-S1	×	×	×	×	×	×	×	×	×	×
		Q173DCPU-S1										
		Q172DSCPU	○ [23]	○ [23]	○ [18]	○	○	×	○	×	○ [23]	○ [23]
		Q173DSCPU										
		Q170MCPU [21] [22]	○ [23]	○ [23] [32]	○	○	○	×	○	○ [4]	○ [23]	○ [23]
		Q170MSCPU [22]	○ [23]	○ [23]	○	○	○	×	○	○	○ [23]	○ [23]
		Q170MSCPU-S1 [22]										
		MR-MQ100	×	×	×	×	×	×	×	×	×	×
MELSECNET/H remote I/O station		QJ72LP25-25	×	×	○	×	×	×	×	×	×	×
		QJ72LP25G										
		QJ72BR15										
CC-Link IE Field Network head module	MELSEC iQ-R Series	RJ72GF15-T2	○	○	×	○	○	×	×	○ [29]	×	×
	MELSEC-L Series	LJ72GF15-T2	×	×	×	○	×	×	×	○	×	×
CC-Link IE Field Network Ethernet adapter module		NZ2GF-ETB [24]	○	○	×	×	×	×	×	×	×	×

*1 Includes the connection where MELSECNET/H is used in the MELSECNET/10 mode. Connection to the remote I/O network is not allowed.
*2 Use a CC-Link IE Controller Network module with the upper five digits of the serial No. later than 09042.
*3 Use a CPU and a CC-Link IE Controller Network module with the upper five digits of the serial No. later than 09042.
*4 Use a CPU with the upper five digits of the serial No. later than 12012.
*5 Use a CPU of function version B or later or a CC-Link IE Controller Network module of function version D or later.
*6 For the multiple CPU system configuration, use a CPU of function version B or later.
*7 Use a CPU with the upper five digits of the serial No. later than 09012.
When the total number of stations in a network is 65 or more, use a CC-Link IE Controller Network module with the upper five digits of the serial No. 09042 or later.
*8 When the total number of stations in a network is 65 or more, use a CC-Link IE Controller Network module with the upper five digits of the serial No. 09042 or later.
*9 Use a CPU with the upper five digits of the serial No. later than 10042 or a CC-Link IE Controller Network module of function version D or later.
*10 Use a MELSECNET/H interface board driver (SW0DNC-MNETH-B) with the version K or later.
*11 Only the host station and the host station settings can be accessed. (Access to other stations or other PLC CPUs are not allowed.)
*12 Use a CPU with the upper five digits of the serial No. later than 10032 or a CC-Link IE Controller Network module of function version D or later.
*13 Use a CPU with the upper five digits of the serial No. later than 13042.
*14 When using a LJ71E71-100, use a CPU with the upper five digits of the serial No. later than 14112.
*15 Use a LJ71E71-100 since L02SCPU and L02SCPU-P have no built-in Ethernet port.
*16 Use a CPU with the upper five digits of the serial No. later than 13012.
*17 The adapter L6ADP-R2 is required.
*18 Access via the serial port (RS-232) of QCPU in the multiple CPU system since the CPU has no serial port.
*19 Use the serial port of a serial communication module controlled by another CPU on the multiple CPU system.
*20 Use a CPU with the upper five digits of the serial No. later than 12042.

*21 When using SV43, use the motion CPU on which any of the following main OS software version is installed.
SW7DNC-SV43Q□: 00F or later
*22 Only the PLC CPU area (CPU No.1) can be connected. The PERIPHERAL I/F cannot be used.
*23 In the Ethernet, MELSECNET/H, or MELSECNET/10 connection, to monitor a QCPU in the multiple CPU system, always use a network module of function version B or later.
*24 Devices of other stations can be monitored via NZ2GF-ETB. (Devices of the host station cannot be monitored.)
*25 Use the built-in Ethernet port since RJ71EN71 is not supported.
*26 Access via the RCPU in the multiple CPU system since the CPU has no USB port to connect to a personal computer.
*27 Mount a safety function module R6SFM next to the RnSFCPU on the base unit. The RnSFCPU and the safety function module R6SFM must have the same pair version. If their pair versions differ, the RnSFCPU does not operate.
*28 Mount a redundant function module R6RFM next to the RnPCPU on the base unit when building a redundant system.
*29 In a redundant system, use a CC-Link IE Field Network interface board with the upper five digits of the serial No. 18042 or later.
*30 Mount the SIL2 function module R6PSFM and redundant function module R6RFM next to the RnPSFCPU on the base unit.
*31 The supported version of the main units varies depending on the Ethernet module to be used.

Ethernet module*	CPU		
	FX3U(C)	FX3G(C)	FX3S
FX3U-ENET-L	Ver. 2.21 or later	FX3U-ENET-L is not supported.	
FX3U-ENET-ADP*	Ver. 3.10 or later	Ver. 2.00 or later	Ver. 1.00 or later

*To connect to FX3SCPU, use FX3U-ENET-ADP Ver.1.20 or later.

*32 PERIPHERAL I/F can be used.

■ **Modules usable when connected with Mitsubishi Electric programmable controllers/C Controller modules/ Motion controllers**

● **Ethernet connection**

• **Programmable controller Ethernet modules**

CPU series	Ethernet module
MELSEC iQ-R Series C Controller module (MELSEC iQ-R Series) Motion controller (MELSEC iQ-R Series) CC-Link IE Field Network head module (MELSEC iQ-R Series)	RJ71EN71 [4] RJ71GN11-T2 [6] [7] [8] [9] NEW
MELSEC-Q Series (Q mode) MELSEC-QS Series C Controller module (MELSEC-Q Series) Motion controller (MELSEC-Q Series) [1]	QJ71E71-100 QJ71E71-B5 QJ71E71-B2 QJ71E71
MELSEC-L Series	LJ71E71-100 [2]
MELSEC-F Series	FX3U-ENET-L [3] FX3U-ENET-ADP [3] [5]

*1　When connecting to a Q170MCPU/Q170MSCPU(-S1), only the PLC CPU area (CPU No.1) can be monitored. The PERIPHERAL I/F cannot be used.
*2　When using a LJ71E71-100, use a CPU with the upper five digits of the serial No. later than 14112.
*3　Options for extension controller may be required depending on the connected CPU.
*4　Use firmware version 12 or higher when building a redundant system.
*5　Use FX3U-ENET-ADP Ver.1.20 or higher to connect to FX3SCPU.
*6　Only available to GT SoftGOT2000 (Multi-channel).
*7　Usable with MELSEC iQ-R Series programmable controller CPUs only.
*8　Use firmware version 11 or higher when using R00CPU, R01CPU, or R02CPU.
*9　Use firmware version 43 or higher when using programmable controller CPUs (excluding R00CPU, R01CPU, R02CPU).

● **Serial communication connection** [1]

• **Programmable controller serial communication modules**

CPU series	Serial communication module	
MELSEC iQ-R Series C Controller module (MELSEC iQ-R Series) Motion controller (MELSEC iQ-R Series) CC-Link IE Field Network head module (MELSEC iQ-R Series)	RJ71C24 [3] RJ71C24-R2 [3]	
MELSEC-Q Series (Q mode) C Controller module (MELSEC-Q Series) Motion controller (MELSEC-Q Series) [2]	QJ71C24 QJ71C24-R2 QJ71C24N QJ71C24N-R2	QJ71CMO QJ71CMON
MELSEC-L Series CC-Link IE Field Network head module (MELSEC-L Series)	LJ71C24 LJ71C24-R2	

*1　Only RS-232 communication can be used.
*2　When connecting to a Q170MCPU/Q170MSCPU(-S1), only the PLC CPU area (CPU No.1) can be monitored.
*3　Use firmware version 07 or higher when building a redundant system.

● **CC-Link IE TSN connection**

CPU Series	CC-Link IE TSN module
MELSEC iQ-R Series	×

● **CC-Link IE Controller Network connection**

• **Network modules (programmable controller side)**

CPU series	CC-Link IE Controller Network module
MELSEC iQ-R Series C Controller module (MELSEC iQ-R Series) Motion controller (MELSEC iQ-R Series)	RJ71GP21-SX [2]
MELSEC-Q Series (Q mode) MELSEC-QS Series C Controller module (MELSEC-Q Series) Motion controller (MELSEC-Q Series) [1]	QJ71GP21-SX QJ71GP21S-SX

*1　When connecting to a Q170MCPU/Q170MSCPU(-S1), only the PLC CPU area (CPU No.1) can be monitored.
*2　Use firmware version 12 or higher when building a redundant system.

• **Network interface boards (personal computer side)**

Type	Network interface board
CC-Link IE Controller Network	Q80BD-J71GP21-SX Q80BD-J71GP21S-SX Q81BD-J71GP21-SX (optical loop) Q81BD-J71GP21S-SX (optical loop, with external power supply function)

Specifications

- There are two ways of usage of GT SoftGOT2000: GT SoftGOT2000 for single channel connection and GT SoftGOT2000 (Multi-channel) for multi-channel connection. GT SoftGOT2000 (Multi-channel) supports Ethernet connection, connection to OPC UA servers, or connection to microcomputers. Therefore in the following list, Ethernet connection column is separated in two columns: Single (GT SoftGOT2000) and Multi (GT SoftGOT2000 (Multi-channel)). For connection with OPC UA servers or microcomputers, please refer to page 170.
- For the details of the connection configuration, please refer to the GT SoftGOT2000 Version1 Operating Manual.

● CC-Link IE Field Network connection
• Network modules (programmable controller side)

CPU series	CC-Link IE Field Network module
MELSEC iQ-R Series C Controller module (MELSEC iQ-R Series) Motion controller (MELSEC iQ-R Series)	RJ71GF11-T2 *2 RJ71EN71 RD77GF4 RD77GF8 RD77GF16 RD77GF32
MELSEC-Q Series (Q mode) C Controller module (MELSEC-Q Series) Motion controller (MELSEC-Q Series) *1	QJ71GF11-T2
MELSEC-QS Series	QS0J71GF11-T2
MELSEC-L Series	LJ71GF11-T2
MELSEC iQ-F Series	×

*1 When connecting to a Q170MCPU/Q170MSCPU(-S1), only the PLC CPU area (CPU No.1) can be monitored.
*2 Use firmware version 12 or higher when building a redundant system.

• Network interface boards (personal computer side)

Type	Network interface board
CC-Link IE Field Network	Q81BD-J71GF11-T2

● MELSECNET/H, MELSECNET/10 connection
• Network modules (programmable controller side)

CPU series	MELSECNET/H, MELSECNET/10 network module	
	Optical loop	Coaxial bus
MELSEC-Q Series (Q mode) *1 MELSEC-QS Series Motion controller (MELSEC-Q Series) *2	QJ71LP21 QJ71LP21-25 QJ71LP21S-25	QJ71BR11 *1
C Controller module (MELSEC-Q Series)	QJ71LP21-25 QJ71LP21S-25	

*1 Use function version B or later of the MELSECNET/H network module and CPU.
*2 When connecting to a Q170MCPU/Q170MSCPU(-S1), only the PLC CPU area (CPU No.1) can be monitored.

• Network interface boards (personal computer side)

Type	Network interface board
MELSECNET/H	Q80BD-J71LP21-25 (optical loop) Q80BD-J71LP21S-25 (optical loop, with external power supply function) Q80BD-J71LP21G (optical loop) Q80BD-J71BR11 (coaxial loop) Q81BD-J71LP21-25 (optical loop)

◆ Mitsubishi Electric industrial computer NEW

Series	Model name	Connection type										
		Ethernet connection		Direct CPU connection		Serial communication connection	CC-Link IE TSN connection	CC-Link IE Controller Network connection	CC-Link IE Field Network connection	MELSEC NET/H connection	MELSEC NET/10 connection *1	MELIPC direct connection
		Single	Multi NEW	RS-232	USB							
MELIPC	MI5122-VW	○	○	×	×	×	×	×	○	×	×	○

*1 Only supports the case where MELSECNET/H is used in the MELSECNET/10 mode. Connection to the remote I/O network is not allowed.

◆ Mitsubishi Electric inverters NEW

Series	Model name	Connection type				
		Ethernet connection		RS-485	RS-232	Multi-drop connection
		Single	Multi NEW			
FR-A800 Series	FR-A8□0 *1	×	○ *3	×	×	×
	FR-A8□2 *1					
	FR-A8□6 *1					
	FR-A8□0-E *2					
	FR-A8□2-E *2					
	FR-A8□6-E *2					
	FR-A8□0-GF *1					
	FR-A8□2-GF *1					
FR-A800 Plus Series	FR-A8□0-CRN *1					
	FR-A8□2-CRN *1					
	FR-A8□0-E-CRN *2					
	FR-A8□2-E-CRN *2					
	FR-A8□0-R2R *1					
	FR-A8□2-R2R *1					
	FR-A8□0-E-R2R *2					
	FR-A8□2-E-R2R *2					
FR-F800 Series	FR-F8□0 *1					
	FR-F8□2 *1					
	FR-F8□6 *1					
	FR-F8□0-E *2					
	FR-F8□2-E *2					
FR-E700 Series	FR-E7□0-NE *2					

*1 Inverter connection is supported by using CC-Link IE Field Network connection via a programmable controller CPU.
*2 Inverter connection is supported by using Ethernet connection via a programmable controller CPU.
*3 Connection is supported by using RJ71GN11-T2 via Ethernet.

◆ Mitsubishi Electric servo amplifiers (SSCNET III/H)

Series	Model name	Motion controller or programmable controller		Connection type									
		Simple motion module	CPU type	Ethernet connection		Direct CPU connection		Serial communication connection	CC-Link IE TSN connection	CC-Link IE Controller Network connection	CC-Link IE Field Network connection	MELSEC NET/H connection	MELSEC NET/10 connection *1
				Single	Multi NEW	RS-232	USB						
MELSERVO-J4 Series	MR-J4-□B MR-J4-□B-RJ MR-J4W2-□B MR-J4W3-□B	—	RnMTCPU	○	○	×	○	○	×	○	○	×	×
		RD77MS	RnCPU	○	○	×	○	○	×	○	○	×	×
		FX5-40SSC-S	FX5CPU	○	○	○	○	×	×	×	×	×	×
		FX5-80SSC-S	FX5CPU	○	○	○	○	×	×	×	×	×	×
MELSERVO-JE Series	MR-JE-□B	RD77MS *2	RnCPU	○	○	×	○	○	×	○	○	×	×
		FX5-40SSC-S	FX5CPU	○	○	○	×	×	×	×	×	×	×
		FX5-80SSC-S	FX5CPU	○	○	○	×	×	×	×	×	×	×

*1 Only supports the case where MELSECNET/H is used in the MELSECNET/10 mode. Connection to the remote I/O network is not allowed.
*2 Use a module with the firmware version 3 or later.

◆ Mitsubishi Electric robot controllers

Series	Controller name	Connection type									
		Ethernet connection		Direct CPU connection		Serial communication connection	CC-Link IE TSN connection	CC-Link IE Controller Network connection	CC-Link IE Field Network connection	MELSEC NET/H connection	MELSEC NET/10 connection *1
		Single	Multi NEW	RS-232	USB						
F Series	CR750-Q(Q172DRCPU)	○ *2	○ *2	○ *3	○ *5	○	×	○ *4	○	○	○
	CR751-Q(Q172DRCPU)										
	CR750-D	○	○	×	×	×	×	×	×	×	×
	CR751-D										
SQ Series	CRnQ-700(Q172DRCPU)	○ *2	○ *2	○ *3	○ *5	○	×	○ *4	○	○	○
SD Series	CRnD-700	○	○	×	×	×	×	×	×	×	×
FR Series	CR800-D	○	○ *7	×	×	×	×	×	×	×	×
	CR800-R(R16RTCPU)	○	○	×	○ *6	×	×	×	×	×	×
	CR800-Q(Q172DSRCPU) NEW	○	○	○ *3	○ *5	○	×	○ *4	○	○	○

*1 Only supports the case where MELSECNET/H is used in the MELSECNET/10 mode. Connection to the remote I/O network is not allowed.
*2 The Display I/F of CRnQ-700, CR750/751-Q cannot be used. Ethernet connections can be established only via the Ethernet module (QJ71E71) or the built-in Ethernet port in the multiple CPU system (QnUDE).
*3 Access via the serial port (RS-232) of QCPU in the multiple CPU system since CRnQ-700, CR750/751-Q, and CR800-Q have no serial port.
*4 Use a CC-Link IE Controller Network module with the upper five digits of the serial No. later than 09042.
*5 Access via QCPU in the multiple CPU system since CR750-Q, CR751-Q, CRnQ-700, and CR800-Q have no USB port.
*6 Access via RCPU in the multiple CPU system since CR800-R has no USB port.
*7 Connectable to the built-in LAN port of CR800-D in Ethernet connection.

◆ Mitsubishi Electric CNCs

Series	Connection type									
	Ethernet connection		Direct CPU connection		Serial communication connection	CC-Link IE TSN connection	CC-Link IE Controller Network connection	CC-Link IE Field Network connection	MELSEC NET/H connection	MELSEC NET/10 connection *1
	Single	Multi NEW	RS-232	USB						
CNC C80 (R16NCCPU-S1)	○	○	×	○ *4	×	×	×	×	×	×
CNC C70 (Q173NCCPU)	○	○	○ *2	○	○	×	○ *3	○	○	○

*1 Only supports the case where MELSECNET/H is used in the MELSECNET/10 mode. Connection to the remote I/O network is not allowed.
*2 Access via the serial port (RS-232) of QCPU in the multiple CPU system since CNC C70 has no serial port.
*3 Use a CC-Link IE Controller Network module with the upper five digits of the serial No. later than 09042.
*4 Access via RCPU in the multiple CPU system since CNC C80 has no USB port.

◆ Non-Mitsubishi programmable controllers/Motion controllers

Manufacturer		Model name		Connection type			
				Ethernet connection		Direct CPU connection (RS-232)	Serial communication connection (RS-232)
				Single	Multi NEW		
OMRON Corporation	SYSMAC CJ1	CJ1H CJ1G	CJ1M	○	○	○	×
	SYSMAC CJ2	CJ2H		○	○	○	×
		CJ2M		○	○	○ *1	×
	SYSMAC CPM	CPM2A		×	×	○	×
	SYSMAC CQM1	CQM1		×	×	○ *2	×
	SYSMAC CQM1H	CQM1H		×	×	○	×
	SYSMAC CP1	CP1E (N type)		×	×	○ *6	×
	SYSMAC CS1	CS1H CS1G	CS1D *3	○	○	○	×
	SYSMAC CVM1/CV *4	CVM1-CPU11-V□ CVM1-CPU01-V□ CV500-CPU01-V□	CV1000-CPU01-V□ CV2000-CPU01-V□	×	×	×	○
	SYSMAC α	C200HX C200HG	C200HE	×	×	○	×
	NJ	NJ501-□□□□ NJ101-□□□□	NJ301-□□□□	×	×	×	×
KEYENCE CORPORATION		KV-700 KV-1000	KV-3000	○	○	×	×
		KV-5000	KV-5500	○	○	×	×
		KV-7300		○	○	×	×
		KV-7500		○	○	×	×

Specifications

- There are two ways of usage of GT SoftGOT2000: GT SoftGOT2000 for single channel connection and GT SoftGOT2000 (Multi-channel) for multi-channel connection. GT SoftGOT2000 (Multi-channel) supports Ethernet connection, connection to OPC UA servers, or connection to microcomputers. Therefore in the following list, Ethernet connection column is separated in two columns: Single (GT SoftGOT2000) and Multi (GT SoftGOT2000 (Multi-channel)). For connection with OPC UA servers or microcomputers, please refer to page 170.
- For the details of the connection configuration, please refer to the GT SoftGOT2000 Version1 Operating Manual.

◆ Non-Mitsubishi programmable controllers/Motion controllers

Manufacturer		Model name		Connection type			
				Ethernet connection		Direct CPU connection (RS-232)	Serial communication connection (RS-232)
				Single	Multi NEW		
TOSHIBA CORPORATION	Unified Controller nv Series	PU811		○	○	×	×
		PUM11 NEW		○	○	×	×
		PUM12 NEW		○	○	×	×
		PUM14 NEW		○	○	×	×
YASKAWA Electric Corporation		GL120	GL130	×	×	○	×
		GL60S GL60H	GL70H	×	×	×	○
		CP-9200SH		×	×	×	○
		CP-9300MS		×	×	○	×
		MP920		○	○	○	○
		MP930		×	×	○	×
		MP940		×	×	○	×
		PROGIC-8		×	×	○	×
		CP-9200 (H)		×	×	○	×
		CP-312		×	×	×	×
		CP-317		○	○	×	○
		MP2200 MP2300	MP2300S	○	○	×	○
		MP3200	MP3300	○	○	×	×
Yokogawa Electric Corporation	FA-M3	F3SP05 F3SP08 F3FP36 F3SP21 F3SP25 F3SP28 F3SP35	F3SP38 F3SP53 F3SP58 F3SP59 F3SP66 F3SP67	○	○	×	×
	FA-M3V	F3SP71-4N F3SP71-4S	F3SP76-7S	○	○	×	×
	STARDOM	NFCP100	NFJT100	○ *7	○ *7	×	×
Siemens AG		SIMATIC S7-200 series *5 SIMATIC S7-300 series	SIMATIC S7-400 series SIMATIC S7-1200 series *5	○	○	×	×

*1 Only CJ2M-CPU1□ can be connected.
*2 Connection to the CQM1-CPU11 is not allowed since the CQM1-CPU11 has no RS-232 interface.
*3 Connection is supported only when a single communication unit is used in a single CPU system configuration.
*4 SYSMAC CVM1/CV can be used with a CPU version 1 or later.
*5 Only OP communication can be used in Ethernet connection of the S7-200 series and the S7-1200 series.
*6 Connection is not available with the E type CP1E.
*7 Only MODBUS®/TCP connection is supported. Use the MODBUS®/TCP master communication driver.

■ Modules usable when connected with non-Mitsubishi controllers in serial communication connection or Ethernet connection

Manufacturer		Ethernet		RS-232	
OMRON Corporation	Ethernet module	CS1W-ETN21 CS1W-EIP21	CJ1W-ETN21 CS1D-ETN21D	—	
KEYENCE CORPORATION	Ethernet module	KV-LE20V KV-EP21V NEW	KV-LE21V	—	
TOSHIBA CORPORATION	Ethernet module	EN811		—	
YASKAWA Electric Corporation	MEMOBUS module Communication module	218IF 218IF-01 218IF-02 *1 218TXB		JAMSC-IF60 JAMSC-IF61 CP-217IF 217IF	217IF-01 218IF-01 218IF-02 *1
Yokogawa Electric Corporation	Ethernet interface module	F3LE01-5T F3LE11-0T F3LE12-0T		—	
Siemens AG	Ethernet module	CP243-1 CP243-1 IT CP343-1 CP343-1 Advanced	CP343-1 IT CP343-1 Lean CP443-1 CP443-1 IT	—	

*1 To connect MP2200, MP2300, or MP2300S using Ethernet connection or RS-232 connection, use a CPU of software version 2.60 or later.

◆ MODBUS® devices

Communication is possible with devices compatible with MODBUS®/TCP master or MODBUS®/TCP slave connection.
For the MODBUS® devices, which have been checked for operation, please refer to the Technical Bulletin "List of Valid Devices Applicable for GOT2000 Series MODBUS® Connection" (No. GOT-A-0070) on the Mitsubishi Electric Factory Automation Global website.

◆ SLMP devices

Communication with SLMP compatible devices is possible.
For the SLMP devices, which have been checked for operation, please refer to the Technical Bulletin "List of SLMP-compatible Equipment Validated to Operate with the GOT2000 Series" (No. GOT-A-0085) on the Mitsubishi Electric Factory Automation Global website.

◆ OPC UA servers NEW

Communication with OPC UA servers is possible.
For the OPC UA servers, which have been checked for operation, please refer to the Technical Bulletin "List of OPC UA Servers Validated to Operate with the GOT2000 Series" (No. GOT-A-0137) on the Mitsubishi Electric Factory Automation Global website.

◆ Microcomputer connection NEW

By connecting a personal computer, microcomputer board, programmable controller, etc. to a GOT, the data can be written to or read from virtual devices of the GOT.

Compatibility with conventional products

◆ Compatibility with GOT1000 Series

The following shows the overview of replacing from the GOT1000 Series. For the details, please refer to the following Technical Bulletins and Renewal Guidance.
- Technical Bulletin "Precautions when Replacing GOT1000 Series with GOT2000 Series" No.GOT-A-0061 (GT16, GT15)
- Technical Bulletin "Precautions when Replacing the GT14 Model with GT2505(HS)-VTBD" No.GOT-A-0125 (GT14)
- Technical Bulletin "Precautions when Replacing GT11 Model with GT27 and GT25 Models" No.GOT-A-0145 (GT11)
- Technical Bulletin "Information and precautions on replacing GOT1000 with GOT2000 (GT10 model → GT21 model)" No.HIME-T-P-0137
- Renewal Guidance "GOT1000 Renewal Guidance" L(NA)08327ENG (GT16, GT15) `Coming soon`

Panel cut dimensions

The panel cut dimensions are the same if the GOT1000 Series and the GOT2000 Series have the same screen size. Changing mounting holes is not required.

GOT1000 Series		GOT2000 Series
15"	GT1695 *1, GT1595 *1	Same dimensions as GT2715.
12.1"	GT1685 *1, GT1585 *1	Same dimensions as GT2712, GT2512.
10.4"	GT167□ *1, GT157□ *1, GT1275 *1	Same dimensions as GT2710, GT2510-V, GT2310.
8.4"	GT166□ *1, GT156□ *1, GT1265 *1	Same dimensions as GT2708, GT2508, GT2308.
5.7"	GT1655 *1, GT155□ *1, GT145□ *2, GT115□ *1, GT105□ *1	Same dimensions as GT2705, GT2505.
3.7"	GT1020 *1	Same dimensions as GT2103. (Although the screen size differs, panel cut dimensions are the same.)

*1 Discontinued product.
*2 To be discontinued product.

Communication units, option units

Communication units and option units for the GT16, GT15, GT12, or GT10 can be used with the GOT2000 Series as-is except for the following devices.

GOT1000 Series		GOT2000 Series	Remarks
RS-422 conversion unit	GT15-RS2T4-9P *1	Use the built-in RS-422/485 interface or GT15-RS4-9S (serial communication unit)	—
	GT15-RS2T4-25P *1		
MELSECNET/10 communication unit	GT15-75J71LP23-Z *1	GT15-J71LP23-25 (MELSECNET/H communication unit)	Use MELSECNET/H communication unit in MELSECNET/10 mode.
	GT15-75J71BR13-Z *1	GT15-J71BR13 (MELSECNET/H communication unit)	
CC-Link communication unit (CC-Link (ID) Ver.1)	GT15-75J61BT13-Z *1	GT15-J61BT13 (CC-Link communication unit)	—
Connection conversion adapter	GT10-9PT5S	—	The adapter is not required on GT2103 and GT2104 because Europe terminal blocks are used.
Ethernet communication unit	GT15-J71E71-100 *1	Use the built-in Ethernet interface or GT25-J71E71-100 (Ethernet communication unit)	—
Multimedia unit	GT16M-MMR *1	GT27-MMR-Z (multimedia unit)	A CF card is used with the unit.
Video input unit	GT16M-V4 *1	GT27-V4-Z (video input unit)	—
	GT15V-75V4 *1		
RGB input unit	GT16M-R2 *1	GT27-R2 (RGB input unit)	—
	GT15V-75R1 *1		
Video/RGB input unit	GT16M-V4R1 *1	GT27-V4R1-Z (video/RGB input unit)	—
	GT15V-75V4R1 *1		
RGB output unit	GT16M-ROUT *1	GT27-ROUT (RGB output unit)	—
	GT15V-75ROUT *1		
CF card unit	GT15-CFCD *1	—	A CF card cannot be used with the GOT2000 Series. Use an SD memory card with the built-in SD memory card slot.
CF card extension unit	GT15-CFEX-C08SET *1	—	

Communication unit / Option unit (side labels)

*1 Discontinued product.

Cables

<GT16, GT15>
- For the details of using the bus connection cables, RS-232 cables, RS-422 cables, or other cables for GT16 or GT15 with GT27 or GT25, please refer to the Technical Bulletin "Precautions when Replacing GOT1000 Series with GOT2000 Series" No. GOT-A-0061.

<GT14>
- RS-232, RS-422, and other cables being used with GT14 can be used as-is with GT2505-VTBD or GT2505HS-VTBD.

<GT10>
- The cables being used with GT1020 can be used as-is with GT2103 (serial type).

Project data

The project data of the GOT1000 Series can be used as-is by converting the GOT Type using GT Designer3 Version 1.100E or later *.

* The supported version differs depending on the GOT2000 models.

◆ Compatibility with GOT900 Series

For the details, please refer to the following Technical Bulletins.
- Technical Bulletin "Precautions when Replacing GOT-A900 Series with GOT2000 Series" No.GOT-A-0062

◆ Compatibility with GOT800, A77GOT, or A64GOT Series

For the details, please refer to the following Technical Bulletins.
- Technical Bulletin "Precautions when Replacing A800, A77GOT, A64GOT Series with GOT2000 Series" No.GOT-A-0063

For the Technical Bulletins, please refer to the Mitsubishi Electric Factory Automation Global website (**www.MitsubishiElectric.com/fa/**).

8

Specifications

Product List

GOT model name

GT27 15 ☐ - X T B A ☐

Symbol	Screen size
15	15"
12	12.1"
10	10.4", 10.1" widescreen, or 10" widescreen
08	8.4"
07	7" widescreen
06	6.5"
05	5.7"
04	4.3"
03	3.8"

Symbol	Structure
None	Standard
F	Open frame
HS	Handy
T	Rugged

Symbol	Resolution
WX	WXGA
X	XGA
S	SVGA
W	WVGA
V	VGA
R	480 × 272 dots
P	320 × 128 dots

Symbol	Display section
T	TFT color
M	TFT monochrome

Symbol	Panel color
B	Black
W	White
S	Silver
N	No frame

Symbol	Power type
A	100 V AC to 240 V AC
D	24 V DC
L	5 V DC

Symbol	Communication interface
None *1	Refer to Remarks column of GOT
S *1	RS-232 and RS-422/485 interfaces, or RS-422 interface only
S2 *1	Two RS-232 interfaces
-GF *2	CC-Link IE Field Network communication unit set

*1 For GT21 only
*2 For GT27/GT25 only

GT27	Advanced model with multi-touch gesture functions
GT25	High-performance, cost efficient, mid-range model
GT23	Unchallenged cost performance
GT21	Compact models with basic functions
GS21	Simple model with pursued usability

GOTs

Classification		Model	Screen size	Display section Display color	Panel color	Power	Remarks
GT27	GT2715	GT2715-XTBA	15" XGA	TFT color 65536 colors	Black	100 to 240 V AC	Multimedia & Video/RGB compatible Multi-touch compatible
		GT2715-XTBD				24 V DC	
	GT2712	GT2712-STBA	12.1" SVGA		Black	100 to 240 V AC	
		GT2712-STBD				24 V DC	
		GT2712-STWA			White	100 to 240 V AC	
		GT2712-STWD *1				24 V DC	
	GT2710	GT2710-STBA	10.4" SVGA		Black	100 to 240 V AC	
		GT2710-STBD				24 V DC	
		GT2710-VTBA	10.4" VGA			100 to 240 V AC	
		GT2710-VTBD				24 V DC	
		GT2710-VTWA			White	100 to 240 V AC	
		GT2710-VTWD *1				24 V DC	
	GT2708	GT2708-STBA	8.4" SVGA		Black	100 to 240 V AC	
		GT2708-STBD				24 V DC	
		GT2708-VTBA	8.4" VGA			100 to 240 V AC	
		GT2708-VTBD				24 V DC	
	GT2705	GT2705-VTBD	5.7" VGA		Black	24 V DC	Multi-touch compatible
GT25	GT2512	GT2512-STBA	12.1" SVGA	TFT color 65536 colors	Black	100 to 240 V AC	—
		GT2512-STBD				24 V DC	
		GT2512F-STNA			—	100 to 240 V AC	Open frame model
		GT2512F-STND				24 V DC	
	GT2510	GT2510-VTBA	10.4" VGA		Black	100 to 240 V AC	—
		GT2510-VTBD				24 V DC	
		GT2510-VTWA			White	100 to 240 V AC	
		GT2510-VTWD *1				24 V DC	
		GT2510F-VTNA			—	100 to 240 V AC	Open frame model
		GT2510F-VTND				24 V DC	
	GT2508	GT2508-VTBA	8.4" VGA		Black	100 to 240 V AC	—
		GT2508-VTBD				24 V DC	
		GT2508-VTWA			White	100 to 240 V AC	
		GT2508-VTWD *1				24 V DC	
		GT2508F-VTNA			—	100 to 240 V AC	Open frame model
		GT2508F-VTND				24 V DC	
	GT2505	GT2505-VTBD	5.7" VGA		Black	24 V DC	—
GT25 Wide	GT2510	GT2510-WXTBD	10.1" WXGA	TFT color 65536 colors	Black	24 V DC	Wide model
		GT2510-WXTSD			Silver *2		
	GT2507	GT2507-WTBD	7" WVGA		Black	24 V DC	
		GT2507-WTSD			Silver *2		
GT25 Handy	GT2506	GT2506HS-VTBD	6.5" VGA	TFT color 65536 colors	Black	24 V DC	Handy GOT
	GT2505	GT2505HS-VTBD	5.7" VGA		Black	24 V DC	
GT25 Rugged	GT2507	GT2507T-WTSD	7" WVGA	TFT color 65536 colors	Silver	24 V DC	Rugged model
GT23	GT2310	GT2310-VTBA	10.4" VGA	TFT color 65536 colors	Black	100 to 240 V AC	—
		GT2310-VTBD				24 V DC	
	GT2308	GT2308-VTBA	8.4" VGA		Black	100 to 240 V AC	
		GT2308-VTBD				24 V DC	

GOTs

Classification		Model	Screen size	Display section Display color	Panel color	Power	Remarks
GT21 Wide	GT2107	GT2107-WTBD	7" WVGA	TFT color 65536 colors	Black	24 V DC	Wide model
		GT2107-WTSD			Silver *2		
GT21	GT2104	GT2104-RTBD	4.3" [480 × 272 dots]	TFT color 65536 colors	Black	24 V DC	Ethernet, RS-422/485, RS-232
	GT2103	GT2103-PMBD	3.8" [320 × 128 dots]	TFT Monochrome (black/white) 32 shade grayscale 5-color LED (white, green, pink, orange, red)	Black	24 V DC	Ethernet, RS-422/485
		GT2103-PMBDS				24 V DC	RS-232, RS-422/485
		GT2103-PMBDS2				24 V DC	RS-232 × 2 channels
		GT2103-PMBLS				5 V DC	RS-422 (FXCPU connection only)
GS21	GS2110	GS2110-WTBD	10" WVGA	TFT color 65536 colors	Black	24 V DC	GOT SIMPLE Series
	GS2107	GS2107-WTBD	7" WVGA		Black		

*1 To comply with the ATEX directive and KCs regulation, protective sheet (GT25-□□PSCC-UC) and special fitting (GT25-□□FIT-EXS) in the "Options" list (page 176) are required separately. (Only protective sheet is required for GT2508-VTWD.) Communication units and option units cannot be used. When using these units, GOT does not conform to the standards. For the details, please refer to the Technical Bulletin "GOT2000 Series in Compliance with the ATEX Directive and KCs Certification Requirements" (No. GOT-A-0101) on the Mitsubishi Electric Factory Automation Global website (**www.MitsubishiElectric.com/fa/**).

*2 The lower part of the panel including the USB environmental protection cover is black.

GOT + CC-Link IE Field Network communication unit sets

Classification		Model	Screen size	Display section Display color	Panel color	Power	Remarks
GT27	GT2715	GT2715-XTBA-GF	15" XGA	TFT color 65536 colors	Black	100 to 240 V AC	GOT + GT15-J71GF13-T2
		GT2715-XTBD-GF				24 V DC	
	GT2712	GT2712-STBA-GF	12.1" SVGA		Black	100 to 240 V AC	
		GT2712-STBD-GF				24 V DC	
		GT2712-STWA-GF			White	100 to 240 V AC	
		GT2712-STWD-GF				24 V DC	
	GT2710	GT2710-STBA-GF	10.4" SVGA		Black	100 to 240 V AC	
		GT2710-STBD-GF				24 V DC	
		GT2710-VTBA-GF	10.4" VGA			100 to 240 V AC	
		GT2710-VTBD-GF				24 V DC	
		GT2710-VTWA-GF			White	100 to 240 V AC	
		GT2710-VTWD-GF				24 V DC	
	GT2708	GT2708-STBA-GF	8.4" SVGA		Black	100 to 240 V AC	
		GT2708-STBD-GF				24 V DC	
		GT2708-VTBA-GF	8.4" VGA			100 to 240 V AC	
		GT2708-VTBD-GF				24 V DC	
	GT2705	GT2705-VTBD-GF	5.7" VGA		Black	24 V DC	
GT25	GT2512	GT2512-STBA-GF	12.1" SVGA	TFT color 65536 colors	Black	100 to 240 V AC	GOT + GT15-J71GF13-T2
		GT2512-STBD-GF				24 V DC	
	GT2510	GT2510-VTBA-GF	10.4" VGA		Black	100 to 240 V AC	
		GT2510-VTBD-GF				24 V DC	
		GT2510-VTWA-GF			White	100 to 240 V AC	
		GT2510-VTWD-GF				24 V DC	
	GT2508	GT2508-VTBA-GF	8.4" VGA		Black	100 to 240 V AC	
		GT2508-VTBD-GF				24 V DC	
		GT2508-VTWA-GF			White	100 to 240 V AC	
		GT2508-VTWD-GF				24 V DC	

Product List

Communication units

Product name	Model	Specifications	Supported model							
			GT27	GT25	GT25 Wide	GT25 Rugged	GT23	GT21 Wide	GT21	GS21
Ethernet communication unit *1	GT25-J71E71-100	Data transfer method: 100BASE-TX, 10BASE-T	●	● *11	—	—	—	—	—	—
Serial communication unit	GT15-RS2-9P	RS-232 serial communication unit (D-sub 9-pin male)	●	● *11	—	—	—	—	—	—
	GT15-RS4-9S	RS-422/485 serial communication unit (D-sub 9-pin female) *1 *2	●	● *11	—	—	—	—	—	—
	GT15-RS4-TE	RS-422/485 serial communication unit (terminal block) *1 Can be used only when connected with temperature controllers/indicating controllers by RS-485 connection or at the GOT multi-drop connection	●	● *11	—	—	—	—	—	—
Q bus connection unit	GT15-QBUS	Q bus connection (1 channel) unit standard model	●	● *11	—	—	—	—	—	—
	GT15-QBUS2	Q bus connection (2 channels) unit standard model	●	● *11	—	—	—	—	—	—
	GT15-75QBUSL	Q bus connection (1 channel) unit slim model *3	●	● *11	—	—	—	—	—	—
	GT15-75QBUS2L	Q bus connection (2 channels) unit slim model *3	●	● *11	—	—	—	—	—	—
MELSECNET/H communication unit	GT15-J71LP23-25	Normal station unit (optical loop)	●	● *11	—	—	—	—	—	—
	GT15-J71BR13	Normal station unit (coaxial bus)	●	● *11	—	—	—	—	—	—
CC-Link IE TSN communication unit	GT25-J71GN13-T2 NEW	Slave station (local station) unit	●	● *11	—	—	—	—	—	—
CC-Link IE Controller Network communication unit	GT15-J71GP23-SX	Normal station unit (optical loop)	●	● *11	—	—	—	—	—	—
CC-Link IE Field Network communication unit	GT15-J71GF13-T2	Intelligent device station unit	●	● *11	—	—	—	—	—	—
CC-Link communication unit	GT15-J61BT13	Intelligent device station unit CC-Link Ver. 2 compliant	●	● *11	—	—	—	—	—	—
Field network adapter unit	GT25-FNADP	Supported network: PROFIBUS DP, DeviceNet *4	●	● *11	—	—	—	—	—	—
Wireless LAN communication unit *5	GT25-WLAN	IEEE802.11b/g/n compliant, built-in antenna, wireless LAN access point (base station) *6, station (client), connection to personal computer, tablet, smartphone Compliance with: Japan Radio Law *7, FCC standards *8, RE Directive *13 (R&TTE Directive *8), SRRC *9, KC *9	●	● *11	●	●	—	—	—	—
Serial multi-drop connection unit	GT01-RS4-M	For GOT multi-drop connection	●	●	●	●	●	●	● *10	—
Connection conversion adapter	GT10-9PT5S	For connecting the RS-422/485 (D-Sub 9-pin connector) and RS-422/485 (terminal block)	—	● *12	—	—	—	—	—	—
RS-232/485 signal conversion adapter	GT14-RS2T4-9P	For connecting the RS-232 (D-Sub 9-pin connector) and RS-485 (terminal block)	—	● *12	—	—	—	—	—	—

*1 May not be able to be used depending on the connection target. For details, please refer to the GOT2000 Series Connection Manual.
*2 Cannot be used when connected with temperature controllers or indicating controllers by RS-485 (2-wire type) connection.
*3 Cannot be stacked with other units.
*4 The unit should be used with an Anybus® CompactCom M40 network communication module manufactured by HMS. Please purchase the module by specifying the article number.

Supported network	Communication module product name	Communication module article number
PROFIBUS DP	ABCC-M40-DPV1	AB6910-B, AB6910-C
DeviceNet	ABCC-M40-DEV	AB6909-B, AB6909-C

*5 Data transfer in wireless LAN communication may not be as stable as that in cable communication. A packet loss may occur depending on the surrounding environment and the installation location. Be sure to perform a confirmation of operation before using this product.
*6 When [Operation Mode] is set to [Access Point] in [Wireless LAN Setting] of GT Designer3, up to five stations are connectable.
*7 The product with hardware version A or later complies with the regulation. The product with hardware version A can be used only in Japan.
*8 The product with hardware version B or later complies with the regulation. The product with hardware version B or later can be used in Japan, the United States, the EU member states, Switzerland, Norway, Iceland, and Liechtenstein.
*9 The product with hardware version D or later complies with the regulation. The product with hardware version D or later can be used in Japan, the United States, the EU member states, Switzerland, Norway, Iceland, Liechtenstein, China (excluding Hong Kong, Macau, Taiwan), and South Korea.
*10 Available to GT2104-RTBD, GT2103-PMBD, and GT2103-PMBDS.
*11 Not available to GT2505-VTBD, GT2506HS-VTBD, and GT2505HS-VTBD.
*12 Only available to GT2505-VTBD.
*13 The product complies with the RE Directive from March 31, 2017.

Communication units for GT25 Handy GOT

Product name	Model	Specifications	Supported model	
			GT2506 Handy	GT2505 Handy
Serial multi-drop connection unit	GT01-RS4-M	For GOT multi-drop connection	●	—
Connection conversion adapter	GT10-9PT5S	For connecting the RS-422/485 (D-Sub 9-pin connector) and RS-422/485 (terminal block)	● *1	—

*1 Usable only when the connector conversion box GT16H-CNB-42S is used.

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Option units

Product name	Model	Specifications	Supported model								
			GT27	GT25	GT25 Wide	GT25 Handy	GT25 Rugged	GT23	GT21 Wide	GT21	GS21
Printer unit	GT15-PRN	USB slave (PictBridge) for printer connection, 1 channel Cable for connection between printer unit and printer (3m) included	●	● *3	—	—	—	—	—	—	—
Multimedia unit	GT27-MMR-Z	For video input (NTSC/PAL), 1 channel, recording video/playing video files	● *1	—	—	—	—	—	—	—	—
Video input unit	GT27-V4-Z	For video input (NTSC/PAL), 4 channels	● *1	—	—	—	—	—	—	—	—
RGB input unit	GT27-R2	For analog RGB input, 2 channels (simultaneous display)	● *1	—	—	—	—	—	—	—	—
Video/RGB input unit	GT27-V4R1-Z	For video input (NTSC/PAL), 4 channels/analog RGB, 1 channel input	● *1	—	—	—	—	—	—	—	—
RGB output unit	GT27-ROUT	For analog RGB output, 1 channel (slim unit)	● *1	—	—	—	—	—	—	—	—
Digital video output unit	GT27-VHOUT	For digital video output, 1 channel HDMI Type A connector	● *1	—	—	—	—	—	—	—	—
Sound output unit	GT15-SOUT	For sound output (φ3.5 stereo pin jack)	●	● *3	—	—	—	—	—	—	—
External I/O unit	GT15-DIOR	For connecting an external I/O device and an operation panel (negative common input, source type output)	●	● *3	—	—	—	—	—	—	—
	GT15-DIO	For connecting an external I/O device and an operation panel (positive common input, sink type output)	●	● *3	—	—	—	—	—	—	—
SD memory card unit	GT21-03SDCD	For mounting an SD memory card	—	—	—	—	—	—	—	● *2	—

*1 Not available to GT2705-VTBD.
*3 Not available to GT2505-VTBD.
*2 Only available to GT2103-PMBD, GT2103-PMBDS, and GT2103-PMBDS2.

Software

Product name	Model	Description			Supported model								
					GT27	GT25	GT25 Wide	GT25 Handy	GT25 Rugged	GT23	GT21 Wide	GT21	GS21
HMI/GOT Screen Design Software MELSOFT GT Works3	SW1DND-GTWK3-E	English Version	Standard license product	DVD-ROM	●	●	●	●	●	●	●	●	●
	SW1DND-GTWK3-EA		Volume license product *1 *9		●	●	●	●	●	●	●	●	●
	SW1DND-GTWK3-EAZ		Additional license product *1 *6		●	●	●	●	●	●	●	●	●
FA Integrated Engineering Software MELSOFT iQ Works *2 *3	SW2DND-IQWK-E	English Version	Standard license product	DVD-ROM	●	●	●	●	●	●	●	●	●
GT Works Text to Speech License *7	SW1DND-GTVO-M	Standard license product			●	● *8	● *7	—	●	—	—	—	—
GT Works3 Add-on License for GOT2000 Enhanced Drive Control (Servo) Project Data *10	SW1DND-GTSV-MZ	Standard license product			●	●	●	●	●	●	—	—	—
License key for GT SoftGOT2000 *4	GT27-SGTKEY-U	USB port license key			—	—	—	—	—	—	—	—	—
Remote Personal Computer Operation Function (Ethernet) License *5	GT25-PCRAKEY-1	1 license			●	●	●	●	●	—	—	—	—
	GT25-PCRAKEY-5	5 licenses			●	●	●	●	●	—	—	—	—
	GT25-PCRAKEY-10	10 licenses			●	●	●	●	●	—	—	—	—
	GT25-PCRAKEY-20	20 licenses			●	●	●	●	●	—	—	—	—
VNC Server Function License *5	GT25-VNCSKEY-1	1 license			●	●	●	●	●	—	●	—	—
	GT25-VNCSKEY-5	5 licenses			●	●	●	●	●	—	●	—	—
	GT25-VNCSKEY-10	10 licenses			●	●	●	●	●	—	●	—	—
	GT25-VNCSKEY-20	20 licenses			●	●	●	●	●	—	●	—	—
MES I/F Function License *5	GT25-MESIFKEY-1	1 license			●	●	●	●	●	—	—	—	—
	GT25-MESIFKEY-5	5 licenses			●	●	●	●	●	—	—	—	—
	GT25-MESIFKEY-10	10 licenses			●	●	●	●	●	—	—	—	—
	GT25-MESIFKEY-20	20 licenses			●	●	●	●	●	—	—	—	—
GOT Mobile Function License *5	GT25-WEBSKEY-1	1 license			●	●	●	●	●	—	—	—	—
	GT25-WEBSKEY-5	5 licenses			●	●	●	●	●	—	—	—	—
	GT25-WEBSKEY-10	10 licenses			●	●	●	●	●	—	—	—	—
	GT25-WEBSKEY-20	20 licenses			●	●	●	●	●	—	—	—	—

*1 The desired number of licenses (2 or more) can be purchased. For details, please contact your local sales office.

*2 Volume license product and additional license product are also available. For more details, please refer to the MELSOFT iQ Works catalog (L(NA)08232ENG).

*3 The product includes the following software.
· System Management Software [MELSOFT Navigator]
· Motion Controller Engineering Software [MELSOFT MT Works2]
· Robot Engineering Software [MELSOFT RT ToolBox3*]
· C Controller Setting and Monitoring Tool [MELSOFT CW Configurator]
· MITSUBISHI ELECTRIC FA Library
· Programmable Controller Engineering Software [MELSOFT GX Works3, GX Works2, GX Developer]
· HMI/GOT Screen Design Software [MELSOFT GT Works3]
· Inverter Setup Software [MELSOFT FR Configurator2]
· Servo Setup Software [MELSOFT MR Configurator2]
* RT ToolBox3 mini (simplified version) will be installed if iQ Works product ID is used. When RT ToolBox3 (with simulation function) is required, please purchase RT ToolBox3.

*4 To use GT SoftGOT2000, a license key for GT SoftGOT2000 is necessary for each personal computer.

*5 1 license is required for 1 GOT unit.

*6 This product does not include the DVD-ROM. Only the license certificate with the product ID No. is issued.

*7 To edit sound files, each personal computer requires one license.

*8 GT2505-VTBD does not support the sound output function.

*9 Volume license product is not sold separately and should be purchased with the standard license product.

*10 Each personal computer requires an add-on license.

Application package

Product name	Model	Description	Supported model								
			GT27	GT25	GT25 Wide	GT25 Handy	GT25 Rugged	GT23	GT21 Wide	GT21	GS21
iQ Monozukuri Process Remote Monitoring *1 **NEW**	AP30-PRM001AA-MA	1 license	●	●	●	●	●	●	●	● *2	●
	AP30-PRM001AA-MB	5 licenses	●	●	●	●	●	●	●	● *2	●
	AP30-PRM001AA-MC	10 licenses	●	●	●	●	●	●	●	● *2	●
iQ Monozukuri ANDON *3	AP30-ADN001AA-MA	1 license	●	●	●	●	●	—	—	—	—
	AP30-ADN001AA-MB	5 licenses	●	●	●	●	●	—	—	—	—
	AP30-ADN001AA-MC	10 licenses	●	●	●	●	●	—	—	—	—
	AP30-ADN001AA-MD	15 licenses	●	●	●	●	●	—	—	—	—
	AP30-ADN001AA-ME	20 licenses	●	●	●	●	●	—	—	—	—

*1 Process Remote Monitoring setting tool, iQ Monozukuri Process Remote Monitoring template project for GT SoftGOT2000, and the Process Remote Monitoring license are included.

*2 Supported by GT2104-RTBD and GT2103-PMBD only.

*3 Contents Publisher, project file of the GOT for iQ Monozukuri ANDON (template screens), GOT Mobile function license, and the iQ Monozukuri ANDON license are included.

Product List

Options

Product name	Model	Specifications		Supported model							
				GT27	GT25	GT25 Wide	GT25 Rugged	GT23	GT21 Wide	GT21	GS21
Protective sheet *1	GT27-15PSGC	For 15"	• Antiglare type • Transparent • With a hole for the USB environmental protection cover • A set of 5 sheets	●	—	—	—	—	—	—	—
	GT25-12PSGC	For 12.1"		●	●	—	—	—	—	—	—
	GT25-10PSGC	For 10.4"		●	●	—	—	—	—	—	—
	GT25-08PSGC	For 8.4"		●	●	—	—	—	—	—	—
	GT25-05PSGC	For 5.7"		●	—	—	—	—	—	—	—
	GT25-05PSGC-2	For 5.7"		—	●	—	—	—	—	—	—
	GT25-10WPSGC	For 10.1" wide models	• Antiglare type • Transparent • Without a hole for the USB environmental protection cover *10 • A set of 5 sheets	—	—	●	—	—	—	—	—
	GT21-07WPSGC	For 7" wide models		—	—	●	—	—	●	—	—
	GT27-15PSCC	For 15"	• Clear type • Transparent • With a hole for the USB environmental protection cover • A set of 5 sheets	●	—	—	—	—	—	—	—
	GT25-12PSCC	For 12.1"		●	●	—	—	—	—	—	—
	GT25-10PSCC	For 10.4"		●	●	—	—	—	—	—	—
	GT25-08PSCC	For 8.4"		●	●	—	—	—	—	—	—
	GT25-05PSCC	For 5.7"		●	—	—	—	—	—	—	—
	GT25-05PSCC-2	For 5.7"		—	●	—	—	—	—	—	—
	GT25-10WPSCC	For 10.1" wide models	• Clear type • Transparent • Without a hole for the USB environmental protection cover *10 • A set of 5 sheets	—	—	●	—	—	—	—	—
	GT21-07WPSCC	For 7" wide models		—	—	●	—	—	●	—	—
	GT25-12PSCC-UC *9	For 12.1"	• Clear type • Transparent • Without a hole for the USB environmental protection cover *2 • A set of 5 sheets	● *9	●	—	—	—	—	—	—
	GT25-10PSCC-UC *9	For 10.4"		● *9	● *9	—	—	●	—	—	—
	GT25-08PSCC-UC *9	For 8.4"		●	● *9	—	—	●	—	—	—
	GT21-04RPSGC-UC	For 4.3"	• Antiglare type • Transparent • Without a hole for the USB environmental protection cover • A set of 5 sheets	—	—	—	—	—	—	●	—
	GT21-03PSGC-UC	For 3.8"		—	—	—	—	—	—	●	—
	GT21-04RPSCC-UC	For 4.3"	• Clear type • Transparent • Without a hole for the USB environmental protection cover • A set of 5 sheets	—	—	—	—	—	—	●	—
	GT21-03PSCC-UC	For 3.8"		—	—	—	—	—	—	●	—
UV protective sheet (for the rugged model) *13	GT25T-07WPSVC	For 7" rugged model	• Antiglare type (UV cutoff) • Transparent • Without a hole for the USB environmental protection cover • 1 sheet	—	—	—	●	—	—	—	—
Environmental protection sheet (for the open frame model)	GT25F-12ESGS	For 12.1"	• For conforming to IP67F • Antiglare type • Slivery • 1 sheet	—	● *7	—	—	—	—	—	—
	GT25F-10ESGS	For 10.4"		—	● *7	—	—	—	—	—	—
	GT25F-08ESGS	For 8.4"		—	● *7	—	—	—	—	—	—
USB environmental protection cover	GT25-UCOV	For 15"/12.1"/10.4"/8.4"	Environmental protection cover for the USB interface on the GOT front face (for replacement)	●	●	—	—	—	—	—	—
	GT25-05UCOV	For 5.7"		●	—	—	—	—	—	—	—
	GT21-WUCOV	For 10.1" wide models/7" wide models/5.7"		—	●	●	—	—	●	—	—
Protective cover for oil *3	GT20-15PCO	For 15"		●	—	—	—	—	—	—	—
	GT20-12PCO	For 12.1"		●	●	—	—	—	—	—	—
	GT20-10PCO	For 10.4"		●	●	—	—	●	—	—	—
	GT21-10WPCO	For 10.1" wide models		—	—	●	—	—	—	—	—
	GT20-08PCO	For 8.4"		●	●	—	—	●	—	—	—
	GT21-07WPCO	For 7" wide models		—	—	●	—	—	—	—	—
	GT25T-07WPCO*14	For 7" rugged model		—	—	—	●	—	—	—	—
	GT25-05PCO	For 5.7"		●	—	—	—	—	—	—	—
	GT25-05PCO-2	For 5.7"		—	●	—	—	—	—	—	—
	GT21-04RPCO	For 4.3"		—	—	—	—	—	—	●	—
	GT10-20PCO	For 3.8"		—	—	—	—	—	—	●	—
Stand	GT15-90STAND	For 15"		●	—	—	—	—	—	—	—
	GT15-80STAND	For 12.1"		●	●	—	—	—	—	—	—
	GT15-70STAND	For 10.4"/8.4"		●	●	—	—	●	—	—	—
	GT25-10WSTAND	For 10.1" wide models		—	—	●	—	—	—	—	—
	GT21-07WSTAND	For 7" wide models		—	—	●	—	—	●	—	—
	GT25T-07WSTAND	For 7" rugged model		—	—	—	●	—	—	—	—
	GT05-50STAND	For 5.7"		●	●	—	—	—	—	—	—

Options

Product name		Model	Specifications		Supported model							
					GT27	GT25	GT25 Wide	GT25 Rugged	GT23	GT21 Wide	GT21	GS21
Memory card	SD memory card	NZ1MEM-2GBSD	SD memory card for GOT, 2 GB		●	●	●	●	●	●	●	●
		NZ1MEM-4GBSD	SDHC memory card for GOT, 4 GB		●	●	●	●	●	●	●	●
		NZ1MEM-8GBSD	SDHC memory card for GOT, 8 GB		●	●	●	●	●	●	●	●
		NZ1MEM-16GBSD	SDHC memory card for GOT, 16 GB		●	●	●	●	●	●	●	●
	CF card	GT05-MEM-128MC	CF card for GT27-MMR-Z, 128 MB		●	—	—	—	—	—	—	—
		GT05-MEM-256MC	CF card for GT27-MMR-Z, 256 MB		●	—	—	—	—	—	—	—
		GT05-MEM-512MC	CF card for GT27-MMR-Z, 512 MB		●	—	—	—	—	—	—	—
		GT05-MEM-1GC	CF card for GT27-MMR-Z, 1 GB		●	—	—	—	—	—	—	—
		GT05-MEM-2GC	CF card for GT27-MMR-Z, 2 GB		●	—	—	—	—	—	—	—
		GT05-MEM-4GC	CF card for GT27-MMR-Z, 4 GB		●	—	—	—	—	—	—	—
		GT05-MEM-8GC	CF card for GT27-MMR-Z, 8 GB		●	—	—	—	—	—	—	—
		GT05-MEM-16GC	CF card for GT27-MMR-Z, 16 GB		●	—	—	—	—	—	—	—
Memory card adaptor		GT05-MEM-ADPC	Conversion adapter from CF card for GT27-MMR-Z to memory card (TYPE II)		●	—	—	—	—	—	—	—
Attachment *11		GT15-70ATT-98	For 10.4"	For replacing GT168□, GT158□, A985GOT *4	●	●	—	—	●	—	—	—
		GT15-70ATT-87		For replacing A870GOT-SWS/TWS or A8GT-70GOT-TB/TW/SB/SW	●	●	—	—	●	—	—	—
		GT15-60ATT-97	For 8.4"	For replacing GT167□, GT157□, A97□GOT	●	●	—	—	●	—	—	—
		GT15-60ATT-96		For replacing A960GOT	●	●	—	—	●	—	—	—
		GT15-60ATT-87		For replacing A870GOT-EWS, A8GT-70GOT-EB/EW, A77GOT-EL, A77GOT-EL-S5/S3	●	●	—	—	●	—	—	—
		GT15-60ATT-77		For replacing A77GOT-CL, A77GOT-CL-S5/S3, A77GOT-L, A77GOT-L-S5/S3	●	●	—	—	●	—	—	—
		GT15-50ATT-95W	For 5.7"	For replacing A956WGOT, F940WGOT	●	●	—	—	—	—	—	—
		GT15-50ATT-85		For replacing A85□GOT	●	●	—	—	—	—	—	—
		GT21-04RATT-40	For 4.3"	For replacing GT104□	—	—	—	—	—	—	●*8	—
Battery		GT11-50BAT	Battery for backup of SRAM data, clock data, and system status log data *6.		● (For replacement)	●*12 (For replacement)	● (For replacement)	● (For replacement)	● (Option)	● (For replacement)	●*5 (For replacement)	—
Special fitting *9		GT25-12FIT-EXS	For 12.1"	For compliance with the ATEX directive and KCs regulation	●*9	—	—	—	—	—	—	—
		GT25-10FIT-EXS	For 10.4"		●*9	—	●*9	—	—	—	—	—

*1 The white model does not have the front USB interface. It is recommended to use the products that the USB environmental protection cover area is closed.

*2 When using the product with the USB environmental protection cover area closed, the front USB interface cannot be used.

*3 Check if the protective cover for oil can be used in the actual environment before use. When using the cover, the front USB interface and human sensor cannot be used.

*4 Including the GP250□ and GP260□ manufactured by Schneider Electric Japan Holdings Ltd.

*5 GT2103-PMBD, GT2103-PMBDS, GT2103-PMBDS2, and GT2103-PMBLS do not have a built-in battery.

*6 GT21 does not support the system status log data backup function.

*7 GT2512F-STNA, GT2512F-STND, GT2510F-VTNA, GT2510F-VTND, GT2508F-VTNA, and GT2508F-VTND only.

*8 Only available to GT2104-RTBD.

*9 Necessary for the GOT to comply with the ATEX directive and KCs regulation. For applicable GOT models, please refer to the Mitsubishi Electric Factory Automation Global website (**www.MitsubishiElectric.com/fa/**).

*10 The protective sheet is shaped not to cover the USB environmental protection cover.

*11 An attachment is usable when the control panel has a thickness of 2 to 3 mm. When an attachment is used, the GOT is not IP67F-rated.

*12 Cannot be used with GT2506HS-VTBD.

*13 The UV protective sheet for the rugged model does not comply with IP66F and IP67F.

*14 The protective cover for oil for the rugged model does not comply with IP66F.

Options for GT25 Handy GOT

Product name	Model	Specifications		Supported model	
				GT2506 Handy	GT2505 Handy
Protective sheet	GT16H-60PSC	For 6.5"	• Clear type • Transparent • A set of 5 sheets	●	—
	GT14H-50PSC	For 5.7"		—	●
Emergency stop switch guard cover	GT16H-60ESCOV	For 6.5"	Cover for preventing incorrect operation of the emergency stop switch	●	—
	GT14H-50ESCOV	For 5.7"		—	●
Connector conversion box	GT16H-CNB-42S	For converting the Handy GOT signals into individual signals for the terminal block, D-sub connector, and Ethernet RJ-45.		●	●*1
	GT16H-CNB-37S	For converting the Handy GOT signals into individual signals for the terminal block and Ethernet RJ-45.		●	●
	GT11H-CNB-37S	For converting the Handy GOT signals into individual signals for the terminal block and D-sub connector.		—	●
Wall-mounting attachment for Handy GOT	GT14H-50ATT	For GT2505 Handy GOT		—	●
SD memory card	NZ1MEM-2GBSD	SD memory card for GOT, 2 GB		●	●
	NZ1MEM-4GBSD	SDHC memory card for GOT, 4 GB		●	●
	NZ1MEM-8GBSD	SDHC memory card for GOT, 8 GB		●	●
	NZ1MEM-16GBSD	SDHC memory card for GOT, 16 GB		●	●
Battery	GT15-BAT	Battery for backup of SRAM data, clock data, and system status log data (for replacement)		●	—
	GT11-50BAT			—	●

*1 Only Ethernet connection is supported. Serial communication connection is not supported.

Product List

Cables

Product name		Model	Cable length	Recommended product [*1]	Specifications	Supported model [*16]							
						GT27	GT25	GT25 Wide	GT25 Rugged	GT23	GT21 Wide	GT21	GS21
QCPU bus connection cable	QCPU connection cable GOT-to-GOT connection cable	GT15-QC06B	0.6 m	○	QCPU ⇔ GOT GOT ⇔ GOT	●	● [*13]	—	—	—	—	—	—
		GT15-QC12B	1.2 m										
		GT15-QC30B	3 m										
		GT15-QC50B	5 m										
		GT15-QC100B	10 m										
	QCPU connection cable GOT-to-GOT connection cable (long distance)	GT15-QC150BS	15 m	○	For connecting the QCPU and GOT (long distance), A9GT-QCNB is required For connecting the GOT and GOT (long distance)	●	● [*13]	—	—	—	—	—	—
		GT15-QC200BS	20 m										
		GT15-QC250BS	25 m										
		GT15-QC300BS	30 m										
		GT15-QC350BS	35 m										
Bus extension connector box		A9GT-QCNB	—	—	Connect the connector box to the main base unit of PLC when connecting the QCPU and GOT (long distance).	●	● [*13]	—	—	—	—	—	—
Bus connection cable ferrite core		GT15-QFC	—	○	Attach a ferrite core to the GOT-A900 bus connection cable when an existing GOT-A900 is replaced with a GOT2000. (two ferrite cores/set)	●	● [*13]	—	—	—	—	—	—
RS-485 terminal block conversion unit		FA-LTBGT2R4CBL05	0.5 m	○	RS-485 terminal block conversion unit With a cable for connecting RS-422/485 (connector) of GOT2000 and a RS-485 terminal block conversion unit	●	● [*13]	●	●	—	—	—	—
		FA-LTBGT2R4CBL10	1 m										
		FA-LTBGT2R4CBL20	2 m										
RS-422 conversion cable		FA-CNV2402CBL	0.2 m	○	For connecting the QCPU/L02SCPU(-P) and the RS-422 cable (GT01-C□R4-25P, GT10-C□R4-25P, GT21-C□R4-25P5) For connecting the L6ADP-R2 and the RS-422 cable (GT01-C□R4-25P, GT10-C□R4-25P, GT21-C□R4-25P5) [MINI-DIN 6-pin ⇔ D-sub 25-pin]	●	●	●	●	●	●	● [*12]	●
		FA-CNV2405CBL	0.5 m										
RS-422 cable	QnA/A/FXCPU direct connection cable Computer link connection cable CC-Link (G4) connection cable	GT01-C30R4-25P	3 m	—	For connecting a QnA/ACPU/motion CPU (A series)/FXCPU and the GOT For connecting an RS-422 connector conversion cable (FA-CNV□CBL) and the GOT For connecting a serial communication module and the GOT For connecting a peripheral connection module (AJ65BT-G4-S3) and the GOT [D-sub 25-pin ⇔ D-sub 9-pin]	●	●	●	●	●	●	● [*3] [*7]	●
		GT01-C100R4-25P	10 m										
		GT01-C200R4-25P	20 m										
		GT01-C300R4-25P	30 m										
		GT10-C30R4-25P	3 m	—	For connecting a QnA/ACPU/FXCPU/motion CPU (A series) and the GOT For connecting an RS-422 connector conversion cable (FA-CNV□CBL) and the GOT For connecting a serial communication module and the GOT For connecting a peripheral connection module (AJ65BT-G4-S3) and the GOT [D-sub 25-pin ⇔ separate wire (connector terminal block 9-pin)]	—	—	—	—	—	—	● [*10]	—
		GT10-C100R4-25P	10 m										
		GT10-C200R4-25P	20 m										
		GT10-C300R4-25P	30 m										
		GT21-C30R4-25P5	3 m	—	For connecting a QnACPU and the GOT For connecting an RS-422 connector conversion cable (FA-CNV□CBL) and the GOT For connecting a serial communication module and the GOT For connecting a peripheral connection module (AJ65BT-G4-S3) and the GOT [D-sub 25-pin ⇔ separate wire (connector terminal block 5-pin)] * GT2103-PMBD cannot be connected to Q00JCPU, Q00CPU, Q01CPU, A Series, or FX1/FX2 Series.	—	—	—	—	—	—	● [*2]	—
		GT21-C100R4-25P5	10 m										
		GT21-C200R4-25P5	20 m										
		GT21-C300R4-25P5	30 m										
	Computer link connection cable	GT09-C30R4-6C	3 m	○	For connecting a serial communication module and the GOT For connecting a computer link module and the GOT [separate wire ⇔ D-sub 9-pin]	●	●	●	●	●	●	● [*3] [*7]	●
		GT09-C100R4-6C	10 m										
		GT09-C200R4-6C	20 m										
		GT09-C300R4-6C	30 m										
	FXCPU direct connection cable FXCPU communication expansion board connection cable	GT01-C10R4-8P	1 m	—	For connecting the FXCPU and GOT For connecting the FXCPU communication expansion board and GOT [MINI-DIN 8-pin ⇔ D-sub 9 pin]	●	●	●	●	●	●	● [*3] [*7]	●
		GT01-C30R4-8P	3 m										
		GT01-C100R4-8P	10 m										
		GT01-C200R4-8P	20 m										
		GT01-C300R4-8P	30 m										
		GT10-C10R4-8P	1 m	—	For connecting the FXCPU and GOT For connecting the FXCPU communication expansion board and GOT [MINI-DIN 8-pin ⇔ separate wire (connector terminal block 9-pin)]	—	—	—	—	—	—	● [*4]	—
		GT10-C30R4-8P	3 m										
		GT10-C100R4-8P	10 m										
		GT10-C200R4-8P	20 m										
		GT10-C300R4-8P	30 m										
		GT21-C10R4-8P5	1 m	—	For connecting the FXCPU and GOT For connecting the FXCPU communication expansion board and GOT [MINI-DIN 8-pin and separate wire (connector terminal block 5-pin)]	—	—	—	—	—	—	● [*2]	—
		GT21-C30R4-8P5	3 m										
		GT21-C100R4-8P5	10 m										
		GT21-C200R4-8P5	20 m										
		GT21-C300R4-8P5	30 m										
		GT10-C10R4-8PL	1 m	—	For connecting the FXCPU and GOT For connecting the FXCPU communication expansion board and GOT [MINI-DIN 8-pin ⇔ separate wire (connector terminal block 9-pin)] * This cable cannot be used for FX1NC, FX2NC, FX3UC-D/DSS, FX3G, FX3GC, or FX3S.	—	—	—	—	—	—	● [*4]	—
		GT10-C10R4-8PC	1 m	—	For connecting the FXCPU and GOT For connecting the FXCPU communication expansion board and GOT [MINI-DIN 8-pin ⇔ connector terminal block 9-pin with separate wire connected]	—	—	—	—	—	—	● [*4]	—
		GT10-C30R4-8PC	3 m										
		GT10-C100R4-8PC	10 m										
		GT10-C200R4-8PC	20 m										
		GT10-C300R4-8PC	30 m										
	RS-422 connector conversion cable	GT10-C02H-9SC	0.2 m	—	For connecting a PLC and the GOT [D-sub 9-pin ⇔ separate wire (connector terminal block 9-pin)]	—	—	—	—	—	—	● [*10]	—

Cables

Product name		Model	Cable length	Recommended product [*1]	Specifications	Supported model [*16]							
						GT27	GT25	GT25 Wide	GT25 Rugged	GT23	GT21 Wide	GT21	GS21
RS-232 cable	Q/LCPU direct connection cable	GT01-C30R2-6P	3 m	—	For connecting the Q/LCPU and GOT For connecting L6ADP-R2 and GOT/personal computer (GT SoftGOT2000) [MINI-DIN 6-pin ⇔ D-sub 9 pin]	●	●	●	●	●	●	● *5 *8	●
		GT10-C30R2-6P	3 m	—	For connecting the Q/LCPU and GOT [MINI-DIN 6-pin ⇔ separate wire (connector terminal block 9-pin)]	—	—	—	—	—	—	● *6	—
					For connecting multiple GOTs [MINI-DIN 6-pin ⇔ separate wire (connector terminal block 9-pin)]	—	—	—	—	—	—	● *11	—
	FXCPU communication expansion board connection cable FXCPU communication special adapter connection cable	GT01-C30R2-9S	3 m	—	For connecting the FXCPU communication expansion board and GOT/personal computer (GT SoftGOT2000) For connecting an FXCPU communication special adapter and GOT/personal computer (GT SoftGOT2000) [D-sub 9-pin ⇔ D-sub 9 pin]	●	●	●	●	●	●	● *5 *8	●
	FXCPU communication special adapter connection cable	GT01-C30R2-25P	3 m	—	For connecting an FXCPU communication special adapter and GOT/personal computer (GT SoftGOT2000) [D-sub 25-pin ⇔ D-sub 9 pin]	●	●	●	●	●	●	● *5 *8	●
	Computer link connection cable CC-Link (G4) connection cable	GT09-C30R2-9P	3 m	○	For connecting a serial communication module and the GOT For connecting a computer link module and the GOT For connecting a peripheral connection module (AJ65BT-R2N) and the GOT [D-sub 9-pin ⇔ D-sub 9 pin]	●	●	●	●	●	●	● *5 *8	●
	Computer link connection cable	GT09-C30R2-25P	3 m	○	For connecting a serial communication module and the GOT For connecting a computer link module and the GOT [D-sub 25-pin ⇔ D-sub 9 pin]	●	●	●	●	●	●	● *5 *8	●
	RS-232 connector conversion cable	GT10-C02H-6PT9P	0.2 m	—	For connecting a PLC and the GOT For connecting multiple GOTs For connecting a barcode reader, RFID, or serial printer and the GOT [D-sub 9-pin ⇔ MINI-DIN 6-pin]	—	—	—	—	—	—	● *11	—
	Data transfer cable	GT01-C30R2-6P	3 m	—	For connecting the GOT and a personal computer [MINI-DIN 6-pin ⇔ D-sub 9-pin] * This cable is usable for the FA transparent function only, and cannot be used to transfer screen or OS data.	—	—	—	—	—	—	● *11	—
Conversion cable for connecting external I/O unit		GT15-C03HTB	0.3 m	○	For connecting an external I/O unit (GT15-DIO) and external I/O interface unit (A8GT-C05TK, A8GT-C30TB, user-fabricated cable) for GOT-A900	●	● *13	—	—	—	—	—	—
Analog RGB cable		GT15-C50VG	5 m	○	For connecting an RGB image output device (external monitor, personal computer, or others) and the GOT	●	—	—	—	—	—	—	—
USB cable	Data transfer cable Printer connection cable	GT09-C30USB-5P	3 m	○	For connecting a personal computer (screen design software) and the GOT For connecting a personal computer (GT SoftGOT2000) and QnU/L/FXCPU For connecting a PictBridge-compatible printer and printer unit (GT15-PRN) [USB-A ⇔ USB Mini-B]	●	●	●	●	●	● *9	● *9	●
Panel-mounted USB port extension		GT14-C10EXUSB-4S	1 m	—	For routing the USB port (host) of the GOT rear face to the front side of the control panel	●	●	●	● *17	—	●	—	—
		GT10-C10EXUSB-5S	1 m	—	For routing the USB port (device) of the GOT rear face to the front side of the control panel	● *14	● *14	—	● *17	—	—	● *15	—

*1 FA-LTBGT2R4CBL□, FA-CNV240□CBL are developed by Mitsubishi Electric Engineering Company Limited and sold through your local sales office.
    The other products listed are developed by Mitsubishi Electric Systems & Service Co., LTD. and sold through your local sales office.
*2 This cable is usable for GT2103-PMBD.
*3 This cable is usable for GT2104-RTBD, GT2103-PMBDS.
*4 This cable is usable for GT2104-RTBD, GT2103-PMBDS, GT2103-PMBLS. For GT2103-PMBLS, use a 3 m or shorter cable.
*5 This cable is usable for GT2103-PMBDS, GT2103-PMBDS2.
*6 This cable is usable for GT2104-RTBD, GT2103-PMBDS2.
*7 GT2104-RTBD, GT2103-PMBDS is possible to correspond by combining the GT10-C02H-9SC type RS-422 connector conversion cable.
*8 GT2103-PMBDS, GT2103-PMBDS2 is possible to correspond by combining the GT10-C02H-6PT9P type RS-232 connector conversion cable.
*9 This cable is not usable for the printer connection.
*10 This cable is usable for GT2104-RTBD, GT2103-PMBDS.
*11 This cable is usable for GT2103-PMBDS, GT2103-PMBDS2.
*12 This cable is usable for GT2104-RTBD, GT2103-PMBD, GT2103-PMBDS.
*13 This cable is not usable for GT2505-VTBD.
*14 This cable is usable for GT2712-STWA, GT2712-STWD, GT2710-VTWA, GT2710-VTWD, GT2512F-STNA, GT2512F-STND, GT2510-VTWA, GT2510-VTWD, GT2510F-VTNA, GT2510F-VTND, GT2508-VTWA, GT2508-VTWD, GT2508F-VTNA, GT2508F-VTND.
*15 This cable is usable for GT2104-RTBD, GT2103-PMBD, GT2103-PMBDS, GT2103-PMBDS2, GT2103-PMBLS.
*16 Note that the usable connection types and cables differ depending on the GOT model. For the details, please refer to the GOT2000 Series Connection Manual.
*17 When using a rugged model, the panel-mounted USB port extension does not comply with IP66F.

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Product List

Product List

Cables for GT25 Handy GOT

Product name		Model	Cable length	Recommended product *1	Specifications	Supported model GT2506 Handy	Supported model GT2505 Handy
External connection cable (to connect the connector conversion box)		GT16H-C30-42P	3 m	—	For connection between the Handy GOT and the connector conversion box (GT16H-CNB-42S)	●	—
		GT16H-C60-42P	6 m	—		●	—
		GT16H-C100-42P	10 m	—		●	—
		GT16H-C30-37PE	3 m	—	For connection between the Handy GOT and the connector conversion box (GT16H-CNB-37S)	●	—
		GT16H-C60-37PE	6 m	—		●	—
		GT16H-C100-37PE	10 m	—		●	—
		GT14H-C30-42P	3 m	—	For connection between the Handy GOT and the connector conversion box (GT16H-CNB-42S)	—	●
		GT14H-C60-42P	6 m	—		—	●
		GT14H-C100-42P	10 m	—		—	●
External connection cable (to connect the connector conversion box or relay cable) *2		GT11H-C30-37P	3 m	—	For connection between the Handy GOT and the connector conversion box (GT16H-CNB-37S and GT11H-CNB-37S) For connection between the Handy GOT and the relay cable (GT11HC15R□-□P)	—	●
		GT11H-C60-37P	6 m	—		—	●
		GT11H-C100-37P	10 m	—		—	●
External connection cable (to connect separate wire) *2		GT11H-C30	3 m	—	For connection between the Handy GOT and the FA device, the power supply, or the operation switch	—	●
		GT11H-C60	6 m	—		—	●
		GT11H-C100	10 m	—		—	●
Relay cable (to connect the external connection cable and a programmable controller) *2		GT11H-C15R4-8P	1.5 m	—	For connecting to a programmable controller	—	●
		GT11H-C15R4-25P	1.5 m	—		—	●
		GT11H-C15R2-6P	1.5 m	—		—	●
RS-422 conversion cable		FA-CNV2402CBL	0.2 m	○	For connecting the QCPU/L02SCPU(-P) and the RS-422 cable (GT01-C□R4-25P, GT10-C□R4-25P, GT21-C□R4-25P5)	●	●
		FA-CNV2405CBL	0.5 m		For connecting the L6ADP-R2 and the RS-422 cable (GT01-C□R4-25P, GT10-C□R4-25P, GT21-C□R4-25P5) [MINI-DIN 6-pin ⇔ D-sub 25-pin]	●	●
RS-422 cable *3	QnA/A/FXCPU direct connection cable / Computer link connection cable / CC-Link (G4) connection cable	GT01-C30R4-25P	3 m	—	For connecting the QnA/ACPU/motion CPU (A series)/FXPU and the GOT For connecting the RS-422 connector conversion cable (FA-CNV□CBL) and the GOT	●	●
		GT01-C100R4-25P	10 m	—	For connecting the serial communication module and the GOT For connecting the peripheral connection module (AJ65BT-G4-S3) and the GOT [D-sub 25-pin ⇔ D-sub 9-pin]	●	●
	Computer link connection cable	GT09-C30R4-6C	3 m	○	For connecting the serial communication module and GOT For connecting a computer link module and GOT [separate wire ⇔ D-sub 9-pin]	●	●
		GT09-C100R4-6C	10 m			●	●
	FXCPU direct connection cable / FXCPU communication expansion board connection cable	GT01-C10R4-8P	1 m	—	For connecting the FXCPU and GOT For connecting the FXCPU communication expansion board and GOT [MINI-DIN 8-pin ⇔ D-sub 9 pin]	●	●
		GT01-C30R4-8P	3 m	—		●	●
		GT01-C100R4-8P	10 m	—		●	●
RS-232 cable	Q/LCPU direct connection cable	GT11H-C30R2-6P	3 m	—	For connecting a QCPU or LCPU and the connector conversion box for Handy GOT (GT11H-CNB-37S/GT16H-CNB-42S)	●	●
	FXCPU communication expansion board connection cable / FXCPU communication special adapter connection cable	GT01-C30R2-9S	3 m	—	For connecting the FXCPU communication expansion board and GOT/personal computer (GT SoftGOT2000) For connecting an FXCPU communication special adapter and GOT/personal computer (GT SoftGOT2000) [D-sub 9-pin ⇔ D-sub 9 pin]	●	●
	FXCPU communication special adapter connection cable	GT01-C30R2-25P	3 m	—	For connecting an FXCPU communication special adapter and GOT/personal computer (GT SoftGOT2000) [D-sub 25-pin ⇔ D-sub 9 pin]	●	●
	Computer link connection cable / CC-Link (G4) connection cable	GT09-C30R2-9P	3 m	○	For connecting a serial communication module and GOT For connecting a computer link module and GOT For connecting the peripheral connection module (AJ65BT-R2N) and GOT [D-sub 9-pin ⇔ D-sub 9 pin]	●	●
	Computer link connection cable	GT09-C30R2-25P	3 m	○	For connecting a serial communication module and GOT For connecting a computer link module and GOT [D-sub 25-pin ⇔ D-sub 9 pin]	●	●
USB cable	Data transfer cable / Printer connection cable	GT09-C30USB-5P	3 m	○	For connecting a personal computer (screen design software) and GOT For connecting a personal computer (GT SoftGOT2000) and QnU/L/FXCPU For connecting a PictBridge-compatible printer and printer unit (GT15-PRN) [USB-A ⇔ USB Mini-B]	●	●

*1 The products listed are developed by Mitsubishi Electric Systems & Service Co., LTD. and sold through your local sales office.

*2 Use the cable version C or later.

*3 The total length of the cables between the Handy GOT and a controller includes the length of an external cable. A cable of 20 m or longer cannot be used for GT2506HS-VTBD and GT2505HS-VTBD.

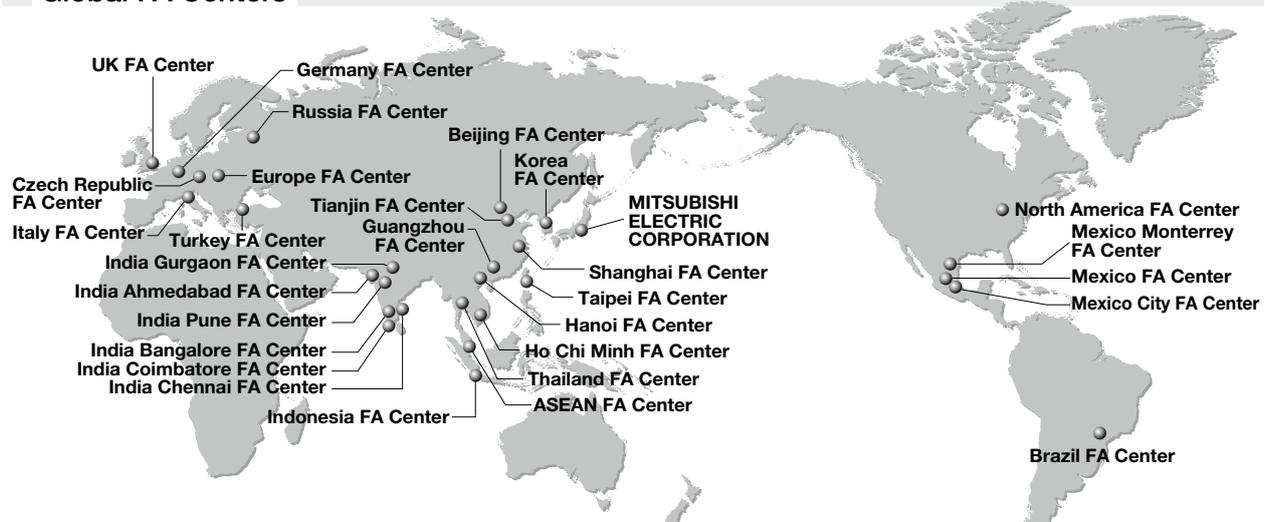## Cables for non-Mitsubishi FA products

RS-232 and RS-422 cables are available from every manufacturer. For more details, please refer to the Mitsubishi Electric Factory Automation Global website (**www.MitsubishiElectric.com/fa/**) or the GOT2000 Series Connection Manual.

Manuals

Manual name	Manual number
GOT2000 Series User's Manual (Hardware)	SH-081194ENG
GOT2000 Series User's Manual (Utility)	SH-081195ENG
GOT2000 Series User's Manual (Monitor)	SH-081196ENG
GOT2000 Series Connection Manual (Mitsubishi Products) For GT Works3 Version1	SH-081197ENG
GOT2000 Series Handy GOT Connection Manual For GT Works3 Version1	SH-081867ENG
GOT SIMPLE Series User's Manual	JY997D52901I
GT Designer3 (GOT2000) Screen Design Manual	SH-081220ENG

Support

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◆ Approval standards

Mitsubishi's products comply with various standards and laws.

Mitsubishi's products also comply with various international standards including UL standards, and maritime certifications.

<International standards>

Mark	Overview	Country/Region
CE	EMC Directive harmonized standards, Low Voltage Directive harmonized standards, RoHS Directive harmonized standards	Europe
Ex	ATEX Directive harmonized standards	Europe
UL	Safety standards	United States
	Class I, Division 2	
cUL	Safety standards	Canada
	Class I, Division 2	
EAC	Technical Regulations on EMC, Technical Regulations on safety of low voltage equipment	Eurasian Economic Union (Russia, Belarus, Kazakhstan, etc.)
KC	EMC standards	Korea
KCs	Safety standards	Korea

<Maritime certifications>

Abbrev.	Certification Organization	Country
ABS	American Bureau of Shipping	United States
BV	Bureau Veritas	France
DNV GL	DNV GL	Norway, Germany
LR	Lloyd's Register	England
NK	NIPPON KAIJI KYOKAI	Japan
RINA	Registro Italiano Navale	Italy

For the details on the approval model within each standard, please refer to the Mitsubishi Electric Factory Automation Global website (**www.MitsubishiElectric.com/fa/**).

Factory Automation Global website

www.MitsubishiElectric.com/fa/

Mitsubishi Electric Factory Automation provides a mix of services to support its customers worldwide, through a consolidated global website. In addition to documents such as catalogs, manuals, and technical bulletins, the latest information about GOT will be posted on the website as soon as it becomes available.

Factory Automation Global website

Human-Machine Interfaces (HMIs)-GOT top page

Industrial Computer MELIPC

The information about MELIPC MI3000 can be viewed from here.

Download

Various documents such as catalogs, manuals, and technical bulletins can be downloaded.

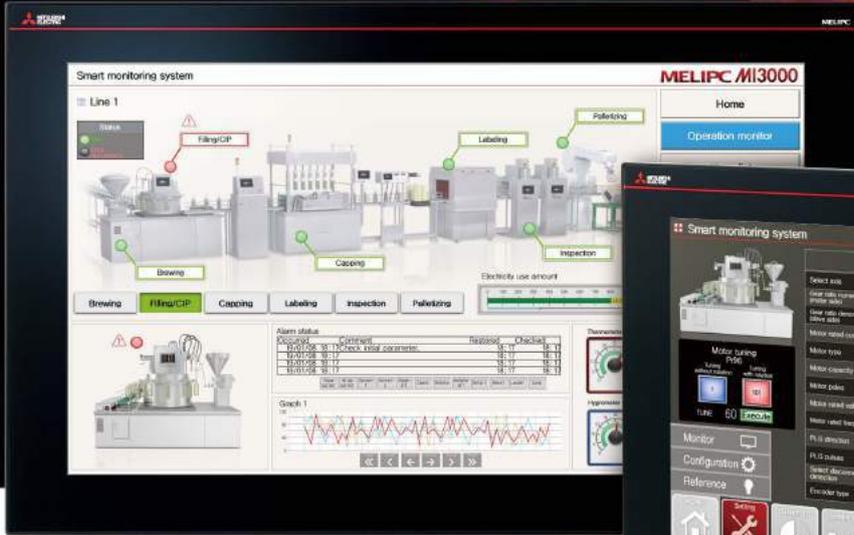**FAQ**

Frequently asked questions about Mitsubishi Electric industrial devices including GOT can be viewed from here.

━━━━━ **Related products** ━━━━━

MELIPC MI3000

Panel computers equipped with integrated touch screens

For details

21.5" widescreen MI3321G-W

15" MI3315G-W

Beautiful, stunning, large screen monitor

Large 21.5-inch widescreen display and 15-inch display models are available. Colorful images are displayed with 16.77 million colors. Light-touch operation is realized with a PCAP touch panel that is widely used for smartphones and tablet devices.

Item	Specifications
Display	15"/21.5", TFT color LCD, 16.77 million colors
Resolution	Full HD, XGA
Backlight	LED
Internal storage	64 GB
Standard interface	Ethernet (3 ports), RS-232, RS-422/485, DisplayPort USB host (USB-A): 2 channels (USB 2.0), 2 channels (USB 3.0) Sound output
Extension interface	PCI Express® x 1 slot, (half size) x 1 mini PCI Express® Full size x 2 M.2 (2280) SATA x 1

Windows® 10 IoT Enterprise pre-installed

Not only familiar Windows® applications, but also usercreated applications can be used to configure systems that meet requirements of individual customers.

Windows® applications

Windows® peripheral devices

User-created applications

Ethernet

Database server   Vision sensor   Ethernet printer

Various software pre-installed

Edgecross Basic Software, SLMP Data Collector, and GT SoftGOT2000 are pre-installed on MI3000. The data collected by Edgecross, SLMP Data Collector, and GT SoftGOT2000 can be monitored on the GT SoftGOT2000 screen.

*1   It is required to install MELSOFT GT OPC UA Client software on MI3000 to interact data between GT SoftGOT2000 and Edgecross Basic Software (model access I/F, data access I/F (OPC UA)). For more information about how to obtain the software, please contact your local sales office.

■ MELIPC MI3000 external appearance [rear face]

❶ **DisplayPort**
Output to an external monitor.
Screen can be displayed on a larger monitor.

❷ **M.2 (2280) SATA (inside the cover)**
Expand storage for collecting and storing large amounts of data.

❸❹ **PCI Express®/mini PCI Express® (inside the cover)**
Expand functions by using an expansion board.

❺ **Sound output**
For outputting sound by connecting a speaker with built-in amplifier.
To use sound notification on GT SoftGOT2000, sound files can be easily created with GT Designer3.
* For the details, please refer to page 118.

❻❼ **USB3.0/USB2.0**
Each interface has two ports for connecting to various USB compatible devices.

❽ **Ethernet**
Various Ethernet compatible devices can be connected to three ports. The network in the office can be separated from the one in the shop floor to enhance security.

❾❿ **RS-232/422/485**
For data collection from existing facilities.

MELIPC MI3000

General specifications

Item		Specifications
Operating ambient temperature		0 °C to 55 °C
Storage ambient temperature		−20 °C to 60 °C
Operating ambient humidity		10% RH to 90% RH, non-condensing
Storage ambient humidity		10% RH to 90% RH, non-condensing
Vibration resistance	Random vibration	Compliant with IEC60068-2-64, 5 to 500Hz, one hour in direction X, Y, Z each
		3 Grms
Shock resistance		Compliant with IEC-60068-2-27, 10 G, half sine wave, 11 msec
Operating atmosphere		No greasy fumes, corrosive gas, flammable gas, excessive conductive dust, and direct sunlight (as well as at storage)
Operating altitude *3*4		—
Overvoltage category *1		II or less
Pollution degree *2		2 or less
Cooling method		Self-cooling
Grounding		Grounding with a ground resistance of 100 Ω or less by using a ground cable that has a cross-sectional area of 2 mm^2 or more.

*1 This indicates the section of the power supply to which the equipment is assumed to be connected between the public electrical power distribution network and the machinery within the premises. Category II applies to equipment that is supplied with power from fixed facilities. The withstand surge voltage for the equipment with the rated voltage up to 300 V is 2500 V.

*2 This indicates the occurrence rate of conductive material in an environment where a device is used. Pollution degree 2 indicates an environment where only non-conductive pollution occurs normally and a temporary conductivity caused by condensation shall be expected depending on the conditions.

Power supply specifications

Item		Specifications	
		MI3321G-W	MI3315G-W
Power supply voltage		24 V DC (+20%, −20%)	
Power consumption	Under the maximum load	90 W	
	Stand alone	27 W	
Applicable wire size		Single wiring (single wire, stranded wire): 0.2 to 2.5 mm^2 (AWG24 to AWG14) Rod terminal with an insulation sleeve: 0.25 to 2.5 mm^2 (AWG22 to AWG14) Double wiring (single wire, stranded wire): 0.2 to 1.5 mm^2 (AWG24 to AWG16)	
Applicable solderless terminal		DN00508D (AWG20), DN00708D (AWG18), DN01508D (AWG16) (manufactured by DINKLE) Crimp tool: DNT13-0101 (manufactured by DINKLE)	
Applicable tightening torque (for terminal block terminal screws)		0.20 N·m (M2.5)	

*3 Do not use or store the product under pressure higher than the atmospheric pressure of altitude 0 m. Doing so may cause malfunction.

*4 No limitations to altitude. When used at a high altitude, the upper limits of the permissible voltage and the operating ambient temperature become lower. Please check performance before use at the customer side.
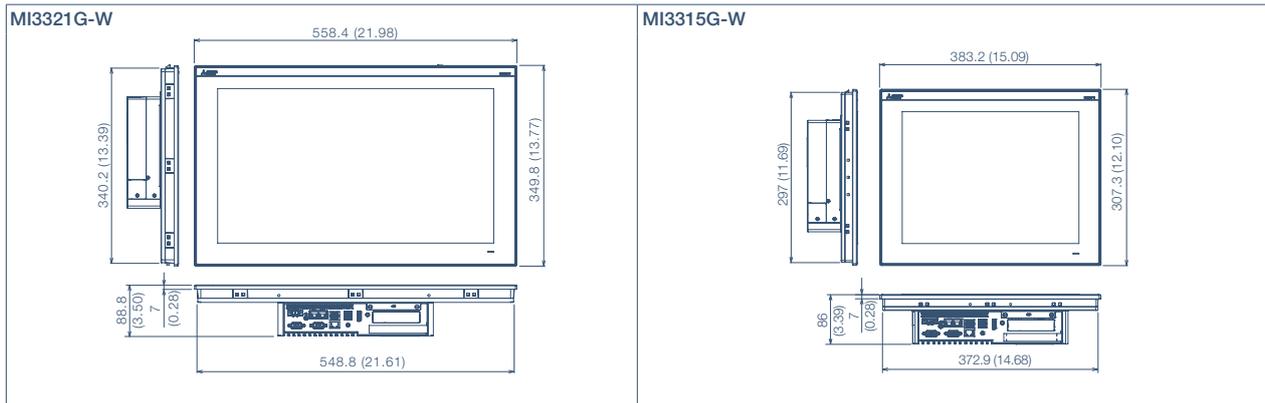
Performance specifications

Item			Specifications	
			MI3321G-W	MI3315G-W
Display section *1 *2	Display device		TFT color LCD	
	Screen size		21.5" widescreen	15"
	Resolution		Full HD: 1920 × 1080	XGA: 1024 × 768
	Contrast ratio		5000:1	700:1
	Display color		16.77 million	
	Backlight		LED backlight (not replaceable)	
	Backlight life *4		50,000 hours	
Touch panel *3*11	Type		PCAP (Projected Capacitive)	
	Simultaneous press		Max. 10 keys *3	
	Transmittance		90%±3%	
Panel color			Black	
Hardware	MPU		Intel® Core™ i3-6100U 2.30 GHz (Dual Core)	
	Memory capacity	RAM	8 GB DDR4	
		ROM	64 GB SSD	
	Battery	Replacement	Not replaceable *4	
		Life	4 years	
Software	OS		Windows® 10 IoT Enterprise 2016 LTSB (64 bit)	
	System language		At initial startup: English	
Additional storage	Interface		M.2(2280) SATA SSD: 1	
Extension interface	PCI Express®		x1 slot, (half size) x 1	
	mini PCI Express®		Full size x 2	
Built-in interface	Display (for external monitor output)	Interface	DisplayPort 1.4	
		Connector	DisplayPort connector	
		Number of ports	1	
		Resolution*5	Max. 3840 x 2160	
	Ethernet	Interface	10BASE-T, 100BASE-TX, 1000BASE-T	
		Number of ports	3	
		Connector for external wiring	RJ-45	
	RS-232	Number of ports	1	
		Transmission speed	300 to 115200 bps	
		Connector for external wiring	D-sub 9-pin (male)	
	RS-232/ RS-422/ RS-485	Interface	RS-232, RS-422, RS-485 (two wire system) Default: RS-232 *6	
		Number of ports	1	
		Transmission speed	300 to 115200 bps	
		Connector for external wiring	D-sub 9-pin (male)	
	USB	Number of ports	• USB3.0: 2 • USB2.0: 2	
		Connector	USB Type-A	
	Sound output	Interface	Audio Line-Out	
		Number of ports	1	
		Connector	φ3.5 stereo mini-jack (3-prong)	
Built-in clock precision			Daily difference: -2 seconds to +2 seconds Monthly difference: -60 seconds to +60 seconds	
POWER LED			2 colors (blue and orange)	
Protective structure			Front: IP66	
Safety standards, radio laws (as of December 2019)			CE, UL, cUL, KC, BSMI, CCC, FCC	
External dimensions			349.8(13.77) (H) × 558.4(21.98) (W) × 88.8(3.50) (D) mm(inch)	307.3(12.10) (H) × 383.2(15.09) (W) × 86(3.39) (D) mm(inch)
Panel cutting dimensions			341.8(13.46) (H) × 550.3(21.67) (W) mm(inch)	298.5(11.75) (H) × 374.5(14.74) (W) mm(inch)
Weight			9.8(21.6) kg(lb)	7.0(15.4) kg(lb)

*1 As a characteristic of liquid crystal display panels, bright dots (always lit) and dark dots (never lit) may appear on the panel. Since liquid crystal display panels comprise a great number of display elements, the appearance of bright and dark dots cannot be reduced to zero. Individual differences in liquid crystal display panels may cause differences in color, uneven brightness and flickering. Note that these phenomena are characteristics of liquid crystal display panels and it does not mean the products are defective or damaged.

*2 Flickering may occur due to vibration, shock, or the display colors.

*3 Multiple touch keys cannot be pressed simultaneously while GT SoftGOT2000 is used.

*4 The battery cannot be removed by users. For the battery replacement, please contact your local sales office.

*5 Maximum resolution at 60 Hz.

*6 The interface can be switched between RS-232, RS-422, and RS-485 with the BIOS.
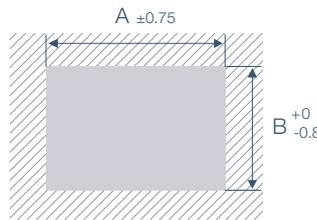
External dimensions

Unit : mm (inch)

MI3321G-W

558.4 (21.98)
340.2 (13.39)
349.8 (13.77)
88.8 (3.50)
7 (0.28)
548.8 (21.61)

MI3315G-W

383.2 (15.09)
297 (11.69)
307.3 (12.10)
86 (3.39)
7 (0.28)
372.9 (14.68)

Panel cut dimensions

Unit : mm (inch)

Screen size	Model	A	B
21.5" widescreen	M3321G-W	550.3 (21.67)	341.8 (13.46)
15"	M3315G-W	374.5 (14.74)	298.5 (11.75)

$A \pm 0.75$

$B \begin{smallmatrix}+0\\-0.8\end{smallmatrix}$

* Panel thickness: 2 mm to 6 mm
(0.08 inch to 0.24 inch)

Product list

MELIPC

Product name	Model	Screen size	Panel color	Outline
MELIPC MI3000	MI3321G-W	21.5" widescreen, Full HD	Black	Edgecross Basic Software, SLMP Data Collector, GT SoftGOT2000 pre-installed
	MI3315G-W	15" XGA	Black	

Option

Product name	Model	Outline
Network interface board	Q81BD-J71GF11-T2	PCI Express® bus compatible, CC-Link IE Field Network (master/local station)
	Q81BD-J71GP21-SX	PCI Express® bus compatible, CC-Link IE Controller Network (control/normal station)
	Q81BD-J71GP21S-SX	PCI Express® bus compatible, CC-Link IE Controller Network (control/normal station), with external power supply function

Engineering tool

Product name	Model	Outline	
HMI/GOT Screen Design Software MELSOFT GT Works3	SW1DND-GTWK3-E	English Version	Standard license product *1
GT Works Text to Speech License *2	SW1DND-GTVO-M	Standard license product	

*1   The desired number of licenses (2 or more) can be purchased. For details, please contact your local sales office.

*2   To edit sound files, each personal computer requires one license.

For the details of MI3000,
please refer to the MELIPC MI3000 catalog
(L(NA)08600ENG).

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Related Products

The actual color may differ slightly from the pictures in this catalog.
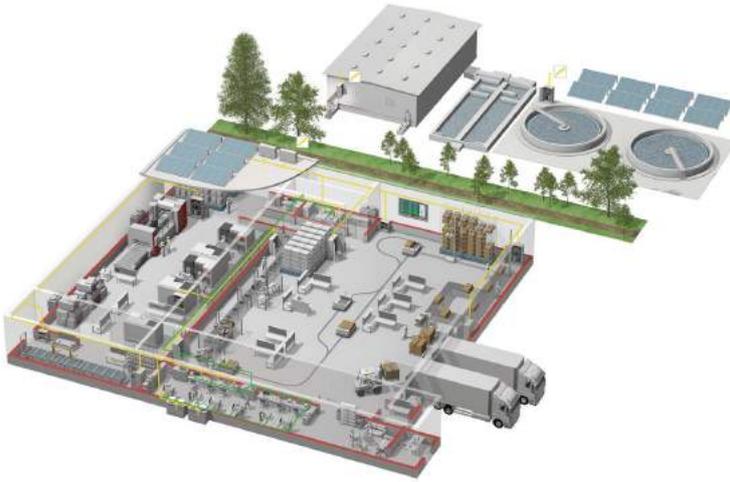The actual display may differ from what are shown on GOT screen images.

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CC-Link CC-Link IE MELSOFT

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Processing machines: EDM, Lasers, IDS

Transformers, Air conditioning, Photovoltaic systems

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* Not all products are available in all countries.

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The release date varies depending on the product and your region. For details, please contact your local sales office.

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