

Actual size



GS21

GS2110-WTBD-N

10" widescreen

GS2107-WTBD-N

7" widescreen

WVGA 800 x 480	TFT color LCD 65536 colors	24 V DC
User memory (ROM) 15 MB	User memory (RAM) 64 MB	Memory Upgrade

Built-in interfaces

Ethernet (1 port)	RS-232	RS-422/485
Rear face USB (device)	SD memory card interface	



GS21 model

Simple model for simple applications

10" widescreen, GS2110-WTBD-N



7" widescreen, GS2107-WTBD-N



Beautiful text display and easy usability

Windows fonts and outline fonts look smoother and more beautiful through anti-aliasing.

Additionally, the VNC server function enables remote monitoring of equipment, enhancing work efficiency.

* To design screens of the upgraded GS21 model, it is required to use GT Works3 Version 1.320J or later.

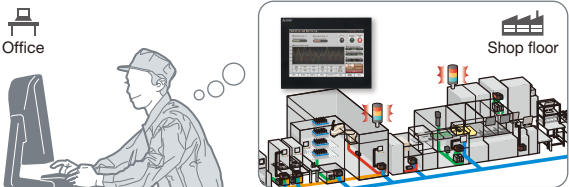
Item	Specifications	
	GS2110-WTBD-N	GS2107-WTBD-N
Display	10" widescreen, TFT color LCD, 65536 colors	7" widescreen, TFT color LCD, 65536 colors
Resolution	WVGA	
Backlight	White LED	
Memory capacity	ROM: 32 MB (User memory: 15 MB) RAM: 128 MB (User memory: 64 MB*) Upgrade	
Standard interface	Ethernet, RS-232, RS-422/485 USB device (USB Mini-B): 1 channel (USB1.1 (Full-Speed 12 Mbps)) SD memory card interface	

* Up to 64 MB of memory for operation (RAM) can be used by writing BootOS with a version of the basic system application of 01.55.*** or later. Also, please design the GOT screen using GT Works3 Version 1.320J or later.

Enabling remote maintenance VNC server function

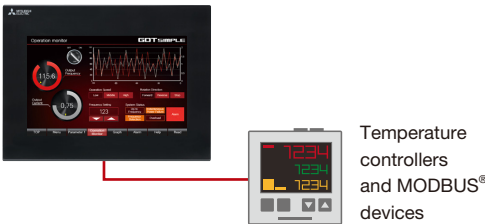
If a problem occurs in a remote location, it is easy to monitor the GOT from your office and take corrective actions quickly.

* A license (GT25-VNCSKEY-□) is required separately.



Support for RS-485 connection

A common interface for RS-422 and RS-485 connections is available. Temperature controllers and MODBUS® devices can be connected.



Specifications

General specifications

Item	Specifications					
Operating mbient temperature ^{*1}	0 °C to 50 °C					
Storage ambient temperature	-20 °C to 60 °C					
Operating/Storage ambient humidity	10% RH to 90% RH, non-condensing ^{*2}					
Vibration resistance	Compliant with IEC 61131-2 ^{*6}		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 ^{*6} (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 ltitude ^{*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, UKCA, ATEX, UL/cUL, KC, KCs), please contact your local sales office.						

Power supply specifications

Item		Specifications	
		GS2110-WTBD-N	GS2107-WTBD-N
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
	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, at 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	

- ^{*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} The definition of 1 G has been changed from 9.8 m/s² to 10 m/s² in IEC 61131-2 ED.3. The product was tested by using the former definition, 1 G = 9.8 m/s².

Performance specifications

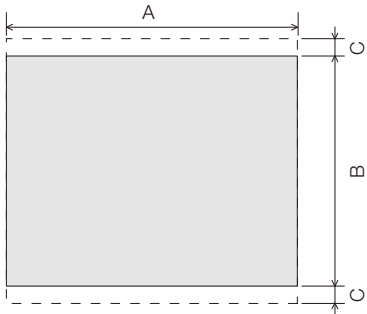
Item	Specifications	
	GS2110-WTBD-N	GS2107-WTBD-N
Display section ^{*1,*2}	Display device	TFT color LCD
	Screen size	10" widescreen
	Resolution	WVGA: 800 × 480 dots
	Display size	222(8.74) (W) × 132.5(5.22) (H) mm(inch)
	Number of displayed characters	16-dot standard font: 50 characters × 30 lines (two-byte characters) 12-dot standard font: 66 characters × 40 lines (two-byte characters)
	Display color	65536 colors
	Brightness adjustment	32 levels
	Backlight ^{*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	
Memory	Memory capacity	Memory for storage (ROM) ^{*8} : 32 MB (User memory: 15 MB) Memory for operation (RAM): 128 MB (User memory: 64 MB ^{*11})
	Life (number of write times)	100000 times
Built-in interface	RS-422/485	1 channel Transmission speed: 115200, 57600, 38400, 19200, 9600, 4800 bps Connector shape: D-sub 9-pin (female) Terminating resistor: 330 Ω, 110 Ω, OPEN (Selectable by the terminating resistor setting switch.)
	RS-232	1 channel Transmission speed: 115200, 57600, 38400, 19200, 9600, 4800 bps Connector shape: D-sub 9-pin (male)
	Ethernet	1 channel Data transfer method: 100BASE-TX, 10BASE-T Connector shape: RJ45 (modular jack) AUTO MDI/MDI-X
	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 August 2024)	CE, UKCA, UL, cUL, KC	
External dimensions	272(10.71) (W) × 214(8.43) (H) × 56(2.20) (D) mm(inch)	206(8.11) (W) × 155(6.10) (H) × 50(1.97) (D) mm(inch)
Panel cut dimensions	258(10.16) (W) × 200(7.87) (H) mm(inch)	191(7.52) (W) × 137(5.39) (H) mm(inch)
Weight (excluding a fitting)	1.3(2.9) kg(lb)	0.9(2.0) kg(lb)
Compatible software package	GT Works3 Version 1.320J 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 switch in an unintended location may operate. 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} Up to 64 MB of memory for operation (RAM) can be used by writing BootOS with a version of the basic system application of 01.55.*** or later. Also, please design the GOT screen using GT Works3 Version 1.320J.

Panel cutting dimensions

Unit: mm (inch)				
Screen size	Model	A	B	C*
10" widescreen	GS2110-WTBD-N	258 (10.16) ^{+2 (0.08)} _{0 (0)}	200 (7.87) ^{+2 (0.08)} _{0 (0)}	10 (0.39) or more
7" widescreen	GS2107-WTBD-N	191 (7.52) ^{+2 (0.08)} _{0 (0)}	137 (5.39) ^{+2 (0.08)} _{0 (0)}	10 (0.39) or more

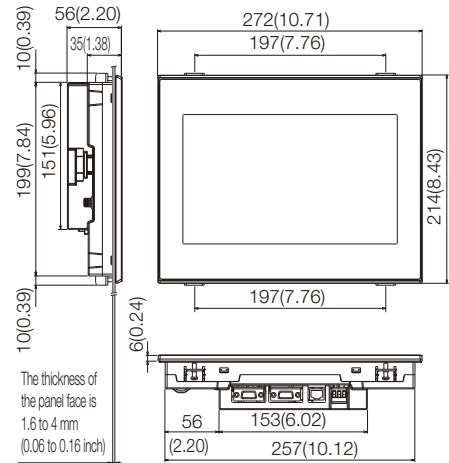
* Dimension C is required for installing fittings on the control panel.



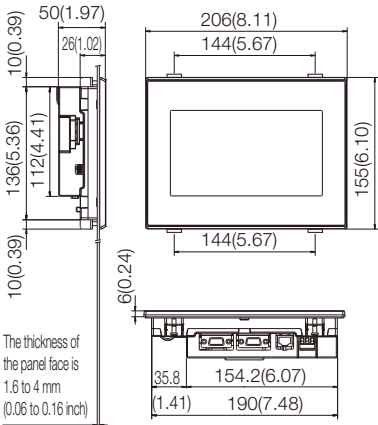
Panel thickness 1.6 to 4mm
(0.06 to 0.16 inch)

External dimensions

GS2110-WTBD-N

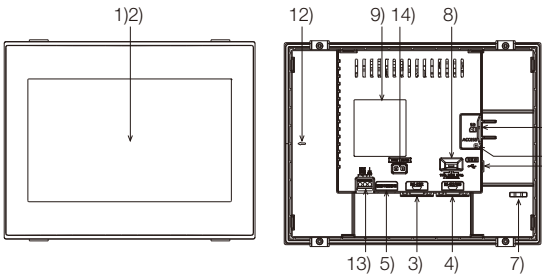


GS2107-WTBD-N

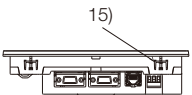
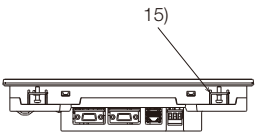
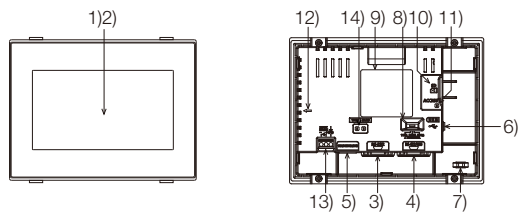


Part names

GS2110-WTBD-N



GS2107-WTBD-N



- 1) Display section
- 2) Touch panel
- 3) RS-232 interface
- 4) RS-422/485 interface
- 5) Ethernet interface
- 6) USB interface (Device)
- 7) Hole for preventing the USB cable from unplugging
- 8) Terminating resistor setting switch
- 9) Rating plate
- 10) SD memory card interface
- 11) SD memory card access LED
- 12) Vertical installation arrow mark
- 13) Power terminal
- 14) Ethernet communication status LED
- 15) Hole for unit installation fittings

Product list

GOTs

Product name	Model	Screen size	Display section/Display color	Panel color	Power
GOT SIMPLE Series	GS2110-WTBD-N	10" WVGA	TFT color/65536 colors	Black	24 V DC
	GS2107-WTBD-N	7" WVGA			

Communication unit

Product name	Model	Specifications
Serial multi-drop connection unit	GT01-RS4-M	For GOT multi-drop connection

Software

Product name	Model	Description		
HMI/GOT Screen Design Software MELSOFT GT Works3	SW1DND-GTWK3-EC	English Version	Site license product ^{*1}	DVD
FA Integrated Engineering Software MELSOFT iQ Works ^{*2}	SW2DND-IQWK-EC	English Version	Site license product ^{*1}	DVD
VNC Server Function License ^{*3}	GT25-VNCSKEY-1	1 license product ^{*3}		
License key for GT SoftGOT2000 ^{*4}	GT27-SGTKEY-U	USB port license key		

^{*1} Anyone can use the product as long as that person belongs to the business office (including overseas offices) of the corporation that purchased the product, or to the same public vocational training facility or other educational institution as the corporation.

^{*2} The product includes the following software.

- System Management Software [MELSOFT Navigator]
- Programmable Controller Engineering Software [MELSOFT GX Works3, GX Works2, GX Developer]
- Motion Controller Engineering Software [MELSOFT MT Works2]
- HMI/GOT Screen Design Software [MELSOFT GT Works3]
- Robot Engineering Software [MELSOFT RT ToolBox3¹]
- Inverter Setup Software [MELSOFT FR Configurator2]
- Setting/monitoring tools for the C Controller module and MELSECWinCPU [MELSOFT CW Configurator]
- Servo Setup Software [MELSOFT MR Configurator2]
- MITSUBISHI ELECTRIC FA Library

^{*3} 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} One license is required for one GOT.

^{*5} To use GT SoftGOT2000, each personal computer requires a license key for GT SoftGOT2000.

^{*6} Products with 5, 10, or 20 licenses are also available. For details, please contact your local sales office.

Options

Product name	Model	Specifications
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

Application packages

Product name	Model	Description
iQ Monozukuri Process Remote Monitoring ^{*1}	AP30-PRM001AA-MA	1 license
	AP30-PRM001AA-MB	5 licenses
	AP30-PRM001AA-MC	10 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.