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**MITSUBISHI  
ELECTRIC**

*Changes for the Better*

FACTORY AUTOMATION

# Graphic Operation Terminal GOT SIMPLE Series New Product Release

Jan. 2021

**NEW VERSION**  
**GOT SIMPLE**  
Graphic Operation Terminal



# GOT SIMPLE

The GOT SIMPLE Series upgrade brings the most demanded new features

For details

Concept movie



10" widescreen, GS2110-WTBD-N **NEW**



7" widescreen, GS2107-WTBD-N **NEW**



## The GOT SIMPLE Series with the most demanded features enables remote maintenance

User memory capacity is now increased to 15 MB. Outline fonts offer improved visibility of screen display.

In addition, remote maintenance is possible using the VNC server function, and thus monitoring devices from a remote location improves work efficiency.

\* To design screens of the upgraded GOT SIMPLE Series, it is required to use GT Works3 Version 1.250L 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: 800 × 480 dots  |  |
| Backlight          | White LED   |  |
| User memory        | Memory for storage (ROM): 15 MB <b>NEW</b>  |  |
| Standard interface | Ethernet, RS-232, RS-422/485 <b>NEW</b><br>USB device (USB Mini-B): 1 channel (USB1.1 (Full-Speed 12 Mbps))<br>SD memory card interface |  |

## GOT SIMPLE Series built-in interfaces

### Ethernet interface

Use Ethernet to simultaneously connect up to two types of industrial devices (programmable controllers, inverters, servo amplifiers, etc.) from different manufacturers. CC-Link IE Field Network Basic compatible devices can also be connected.

### RS-232 interface

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



### SD memory card interface

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

### USB interface: device (USB Mini-B)

Connect to a personal computer and transfer data.

**NEW**  
Supported connection to BRIGHTTEK printers by using the RS-232 interface.  
\* For the connectable printers, please refer to the Technical Bulletin "List of Valid Devices Applicable for GOT2000 Series and GOT SIMPLE Series for Overseas" (GOT-A-0160).

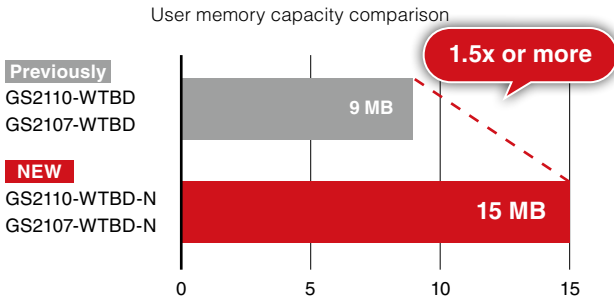
### RS-422/485 interface **NEW**

Connect to various industrial devices (programmable controllers, inverters, servo amplifiers, etc.), barcode readers, temperature controllers, and MODBUS® devices.



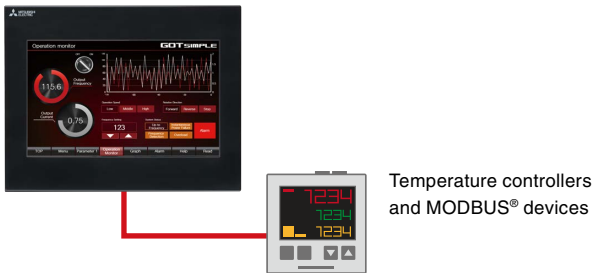
# 1 Expanded user memory capacity **NEW**

The user memory capacity has been expanded to 15 MB from the GOT SIMPLE Series previous model. There is no need to worry about the project data size when designing screens.



# 2 Support RS-485 connection **NEW**

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



# 3 Support outline font **NEW**

Outline fonts can now be used on the GOT SIMPLE Series. Antialiasing smoothes out text edges and displays clear characters, offering improved visibility of screen display.

Previously  
Trend graph

16dot HQ Gothic

**NEW**  
Trend graph

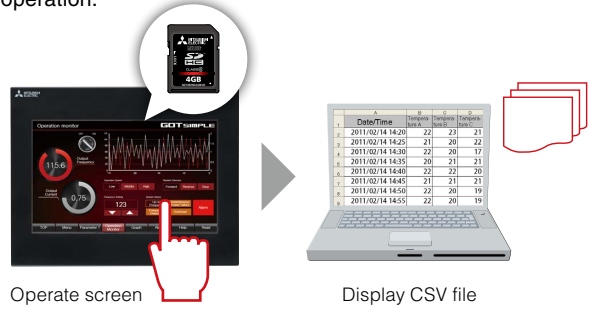
Outline Gothic (antialiasing enabled)

Clear characters improves visibility

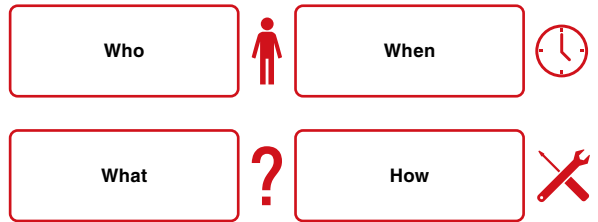
# 4 Enhanced traceability for easy troubleshooting

## Operation log function **NEW**

GOT records the operation information, such as the “what, when, and how” of an operation performed, in chronological order in an SD memory card. Use of the operation log function combined with the operator authentication function records additional information of “who” performed the operation.



Using login management of the operator authentication function and recording operations by the operators enables you to check the “who, what, when, and how” of an operation performed. This is useful for preventing invalid operations and identify the cause of problems.



# 5 Remote maintenance by using the VNC server function **NEW**

## VNC server function **NEW**

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



■ GOTs

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

■ Power supply specifications

| Item   | 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 |
|  | Backlight OFF   | 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 |                             |

■ Performance specifications

| Item  | 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)<br>12-dot standard font: 66 characters × 40 lines (two-byte characters)  |
|   | Display color  | 65536 colors  |
|   | Brightness adjustment                                  | 32 levels   |
| Touch panel*3*9                                   | Backlight*4  | LED (not replaceable)   |
|   | Type   | Analog resistive film   |
|   | Key size   | Minimum 2 × 2 dots*7 (per key)  |
| Panel color                                       | Simultaneous press                                     | Not available*5 (Only 1 point can be touched.)  |
|   | Life   | 1 million touches or more (operating force: 0.98 N or less)   |
| User memory                                       | User memory capacity                                   | Memory for storage (ROM)*10: 15 MB  |
|   | 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: 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 January 2021) | 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 Version1.250L 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 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.

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. The release date varies depending on the product and your region. For details, please contact your local sales office.

■ General specifications

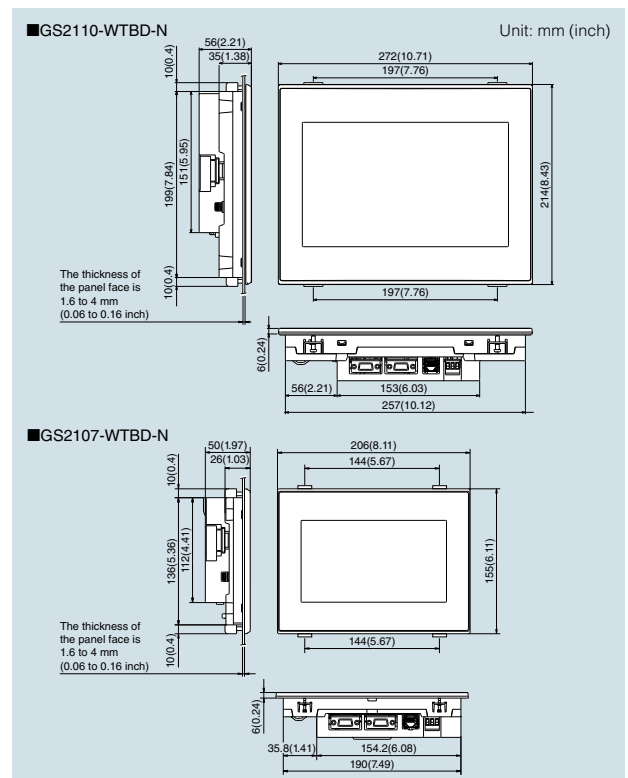
| Item                               | GS2110-WTBD-N / GS2107-WTBD-N   |                              |                     |              |                                       |
|------------------------------------|---|------------------------------|---------------------|--------------|---------------------------------------|
| Operating ambient temperature*1    | 0 to 50°C   |                              |                     |              |                                       |
| Storage ambient temperature        | -20 to 60°C   |                              |                     |              |                                       |
| Operating/Storage ambient humidity | 10% RH to 90% RH, non-condensing*2  |                              |                     |              |                                       |
| Vibration resistance               | Compliant with IEC 61131-2  | Under intermittent vibration | Frequency           | Acceleration | Half amplitude                        |
|                                    |   | Under continuous vibration   | 5 to 8.4 Hz         | -            | 3.5 mm                                |
| Shock resistance                   | Compliant with IEC 61131-2 (147 m/s <sup>2</sup> (15G), 3 times in each X, Y, or Z direction)   | 8.4 to 150 Hz                | 9.8m/s <sup>2</sup> | -            | 10 times in each X, Y, or Z direction |
|                                    |   | 5 to 8.4 Hz                  | -                   | 1.75 mm      | -                                     |
| 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 <sup>2</sup> or more. If impossible, connect the ground cable to the control panel. |                              |                     |              |                                       |

- \*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.

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](http://www.MitsubishiElectric.com/fa)).

■ External dimensions



**⚠ Precautions for safe use**  
To use the products given in this publication properly, always read the relevant manuals before beginning operation.

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