



for a greener tomorrow



**MITSUBISHI
ELECTRIC**

Changes for the Better

FACTORY AUTOMATION

e-Factory

Graphic Operation Terminal

GOT2000 Series



The GOT2000
Series in the palm
of your hand.



GT25 Handy GOT
New GT2506HS-VTBD

GOT2000

Graphic Operation Terminal

GT25 Handy GOT inherits various features of GT16 Handy GOT



Improve device safety

Emergency stop switch



An emergency stop switch is used to stop the operation of devices in an emergency. It utilizes a "normally closed contact" for safety. An emergency stop switch guard cover (option) is also available to prevent accidental operation.

▲ Emergency stop switch guard cover installed

To operate or stop the machine

LED operation switches

Push button switches with LEDs (green) that confirm the operation of an externally connected device have been adopted. They can be used to operate and stop machines. Furthermore, button names can be changed freely by using a name sheet.



▲ An operation switch name sheet can be inserted

Large capacity data storage

SD memory card interface

Boot OS, OS, project data, recipe data, alarm data, logging data, and operation log data etc.



In addition to the built-in 32 MB memory, a large amount of data such as document display data, logging data, and backup data can be stored by installing an SD memory card (sold separately).

NEW

GT2506HS-VTBD 6.5"

VGA 640 x 480 dots	TFT 65536 colors	24 V DC power
SD memory card interface	Memory for operation (RAM) 80 MB	USB host & USB device

Safety in case of an accident

Grip switch

A three-position (OFF-ON-OFF) enabling switch has been adopted to prevent accidental operation or be used as an interlock to prohibit operation. The GOT connects to an external device as a dead man's switch and commands can be sent to a machine to stop operation immediately.



The switch is disengaged when it is fully pressed in or released.



USB host & USB device

Keylock switch (2-position switch)

One-touch connector with lock

Ethernet

RS-232

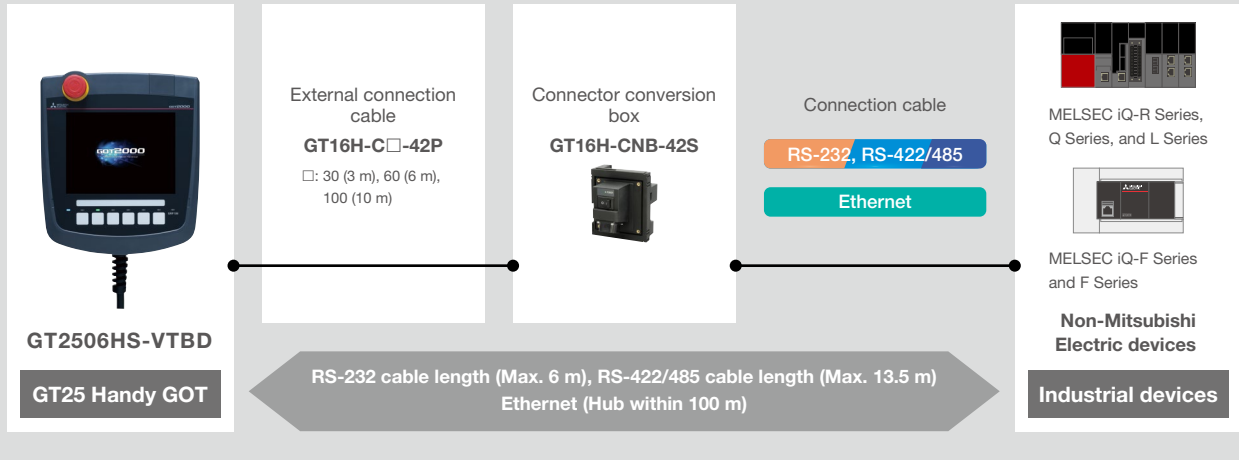
RS-422/485

CC-Link IE Field Basic

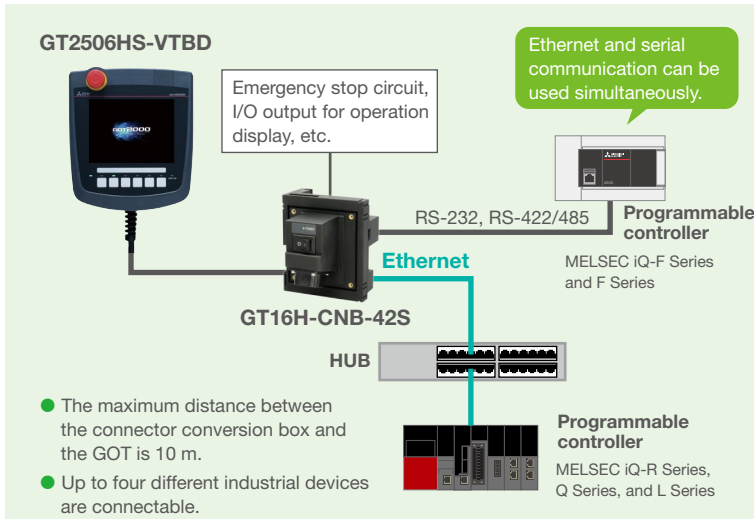
Compatible with the GT16 Handy GOT cables

GT25 Handy GOT to industrial devices connection cables (option)

Selectable optimum connection methods to suit your facility. It is possible to combine the connector conversion box and cables from the options.



System configuration example when connected via Ethernet



Connector conversion box

GT16H-CNB-42S

Required to connect the GT25 Handy GOT by serial connection or Ethernet.

Terminal block for connecting 24 V DC power supply and emergency stop switch

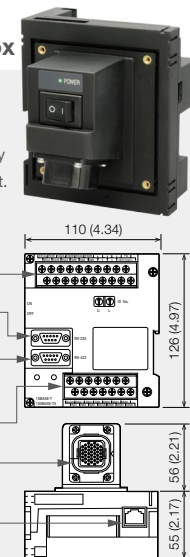
RS-232 connector
RS-422/485 connector

Terminal block for operation switch, grip switch, and keylock switch connection

Handy GOT connector

Ethernet connector

Unit: mm (inch)



Function comparison of Handy GOT models

Item		GT2506HS	GT1665HS	GT1455HS	
Hardware specifications	Memory				
	Memory for storage (ROM)	32 MB	15 MB	9 MB	
	Memory for operation (RAM)	80 MB	—	—	
	Ethernet	●	●	●	
	USB host/USB device	●/●	●/●	●/●	
Screen size	6.5"	6.5"	5.7"		
Resolution	VGA	VGA	QVGA		
Memory card	SD	CF	SD		
Recipe display (record list)		●	—	—	
Functions	Document display	Memory	●	●	
		(Memory)	●	●	
	Historical trend graph	(Memory)	●	●	
	Logging	(Memory)	●	●	
	GOT Mobile function	License	(Memory)	●	—
		License	(Memory)	●	—
	VNC server function	License	●	●	
	Remote personal computer operation function (Ethernet)	License	●	—	
	MES interface function	License	(Memory)	●	—
	Functions	Operation log	Memory	●	—
KANA KANJI conversion			●	●	
Backup/Restoration		Memory	●	●	
FA transparent function			●	●	
Multi-channel function			4 ch	4 ch	
SoftGOT-GOT link function		License	●	—	
Sequence program monitor (Ladder)		Memory	●	●	
		Memory	●	●	
Sequence program monitor (SFC)		Memory	●	—	
Network monitor			●	—	
CC-Link IE Field Network diagnostics			●	—	
Drive recorder GOT Drive	(Memory)	●	—		
Servo amplifier monitor GOT Drive		●	—		
R/Q motion monitor GOT Drive		●	—		
Log viewer	(Memory)	●	●		
System launcher		●	—		

License License required Memory SD memory card or USB memory required Battery Battery required () Required depending on conditions of use

GT2506HS-VTBD

Performance specifications

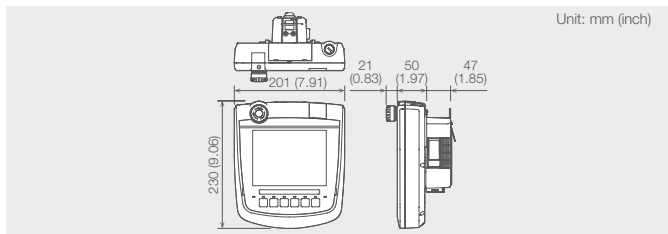
Item	Specifications	
Display section ^{1,2}	Display device	TFT color LCD
	Screen size	6.5"
	Resolution	VGA: 640 x 480 dots
	Display size	132.5(5.22) (W) x 99.4(3.91) (H) mm(inch)
	Number of displayed characters	16-dot standard font: 40 characters x 30 lines (two-byte characters) 12-dot standard font: 53 characters x 40 lines (two-byte characters)
	Display color	65536 colors
	Brightness adjustment	32 levels
Touch panel ³	Backlight	LED (not replaceable)
	Backlight life ⁴	Approx. 40000 h (operating ambient temperature: 25°C, display intensity: 50%)
	Type	Analog resistive film
	Key size	Minimum 2 x 2 dots ⁶ (per key)
User memory	Simultaneous press	Not available ⁷ (Only 1 point can be touched.)
	Life	1 million touches or more (Operating force: 0.98 N or less)
	User memory capacity	Memory for storage (ROM): 32 MB, Memory for operation (RAM): 80 MB
Built-in clock precision	Memory for storage (ROM): 32 MB, Memory for operation (RAM): 80 MB	
Battery	Life (Number of write times)	100000 times
	Built-in clock precision	±90 seconds/month (ambient temperature: 25°C)
Built-in interface	Life	GT15-BAT lithium battery
	Life	Approx. 5 years (Ambient temperature: 25°C)
	RS-232	RS-232 or RS-422/485, 1 channel (Select one channel. RS-422/485 is set as the factory default.)
	Ethernet	1 channel. Data transfer method: 100BASE-TX, 10BASE-T Connector shape: square, 42-pin (male)
	USB (host)	1 channel (top). Maximum transfer rate: high-speed 480 Mbps Connector shape: USB-A
Buzzer output	USB (device)	1 channel (top). Maximum transfer rate: high-speed 480 Mbps Connector shape: USB Mini-B
	SD memory card	1 channel. SDHC compliant (maximum 32 GB)
	POWER LED	2 colors (blue and orange)
Protective structure ⁵	Single tone (tone and tone length adjustable)	
Safety standards, radio laws (as of August 2017)	2 colors (blue and orange)	
External dimensions	IP65F (When an external cable is connected. The rating is not applied to the relay connector side of the external cable.)	
	CE, UL, cUL, EAC, KC	
Weight	201(7.91) (W) x 230(9.06) (H) x 97(3.82) (D) mm(inch) (excluding projections such as the emergency stop switch)	
Compatible software package	1.2(2.6) kg(lb) (GOT main unit only)	
	GT Works3 Version1.170C 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 of 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 to lengthen the backlight life, enable the screen saver function and turn off the backlight.
- ⁵ Note that the structure does not guarantee protection in all user environments. The rating is not applied when the interface environment protection cover or the environmental protection back cover is removed. The rating is not used in an environment where the GOT is exposed to oil or chemicals for a long time, or where oil mist fills the air.
- ⁶ Minimum size of a key that can be placed. To ensure safe use of the product, the following settings are recommended.
 • Key size: 16 x 16 dots or larger • Distance between keys: 16 dots or more
- ⁷ 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.

Switch specifications

Item	Specifications
Operation switch	6 switches (6 contacts/common), N/O contact, Max. rating 10mA/24 V DC, Life: 1000000 times
Grip switch	1 switch (single wiring), 2 N/O contacts, 3-position system OFF-ON-OFF enable switch (deadman switch), Max. rating 1A/24 V DC (resistance load), Max. rating 0.3A/24 V DC (induction load), Life: 1000000 times
Emergency stop switch	1 switch (single wiring), 3 N/C contacts, Max. rating 1A/24 V DC (resistance load), Maximum rating 0.3A/24 V DC (induction load), Life: 1000000 times
Keylock switch (2-position switch)	1 switch (single wiring), 2-position, 2-notch type (A key can be inserted and removed on only the left side. Two keys are provided.), Maximum rating 1A/24 V DC (resistance load), Maximum rating 0.3A/24 V DC (induction load), Life: 1000000 times
Operation switch LED	6 green LEDs (lighting control from display section)
Grip switch LED	1 green LED (lighting control from display section)

External dimensions



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

General specifications

Item	Specifications	
Operating ambient temperature	0°C to 40°C	
Storage ambient temperature	-20°C to 60°C	
Operating/Storage ambient humidity	10% RH to 90% RH, non-condensing	
Vibration resistance	Compliant with JIS B3502 and IEC 61131-2	
	Under intermittent vibration	Frequency: 5 to 8.4 Hz, 8.4 to 150 Hz Acceleration: 9.8 m/s ² Half amplitude: 3.5 mm Sweep count: 10 times in each of X, Y, and Z directions
Shock resistance	Under continuous vibration	Frequency: 5 to 8.4 Hz, 8.4 to 150 Hz Acceleration: 4.9 m/s ² Half amplitude: 1.75 mm Sweep count: —
	Compliant with JIS B3502 and IEC 61131-2. (147 m/s ² (15G), 3 times in each of X, Y, and Z directions)	
Operating atmosphere	No oily fumes, corrosive gas, flammable gas, excessive conductive dust, or direct sunlight. (as well as when in storage)	
Operating altitude ¹	2000 m or less	
Overvoltage category ²	II or less	
Pollution degree ³	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.	

- ¹ Do not use or store the GOT under the atmospheric pressure higher than that at an altitude of 0 m. Doing so may cause a malfunction.
- ² 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 surge withstand voltage is 2500 V for equipment with ratings up to 300 V.
- ³ 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
Power supply voltage	24 V DC (+10%, -15%)
Power consumption	Under the maximum load: 11.6 W or less Main unit with backlight off: 8.2 W
Inrush current	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: 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 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

Product list

Classification	Model	Specifications/remarks
GOT ¹	GT2506HS-VTBD	Display section: 6.5" VGA, TFT color LCD, 65536 colors, panel color: black, power supply: 24 V DC
Protective sheet	GT16H-60PSC	For 6.5" Clear type, a set of 5 sheets
Emergency stop switch guard cover	GT16H-60ESCOV	Cover for preventing incorrect operation of the emergency stop switch
Battery	GT15-BAT	Battery for backup of SRAM data, clock data, and system status log data (for replacement)
Serial multi-drop connection unit	GT01-RS4-M	For the GOT multi-drop connection
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
Connector conversion box	GT16H-CNB-42S	The connector conversion box is used to convert the Handy GOT connector signals into individual signals for the terminal block, D-sub connector, and Ethernet RJ-45.
External connection cable (to connect the connector conversion box)	GT16H-C30-42P	3 m
	GT16H-C60-42P	6 m
	GT16H-C100-42P	10 m
HMI/GOT Screen Design Software MELSOFT GT Works3	SW1DND-GTWK3-E	English version, standard license product ² , DVD-ROM
GOT Mobile function license ³	GT25-WEBSKEY-1	1 license

- ¹ For compatible cables, refer to the GOT2000 Series Handy GOT Connection Manual.
- ² In addition to the standard license product, volume license product and additional license product are also available. For more details, please contact your local sales office.
- ³ 1 license is required for 1 GOT unit.

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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