**EBG 259-EN** 



## **GOT2000**

## The next level of Graphic Operator Terminals

## Viewing your production output

has never looked better







High end CPU and expanded memory



Intuitive operation by multi-touch/gesture



Comprehensive communications functions including Ethernet



Monitoring speed and booting time twice as fast

# Your window to better production control



GOT2000 improves transparency and productivity in your production



Multi-touch and gestures for easy operation

#### **Advanced functionality**

Mitsubishi Electric has raised the bar for HMIs with the GOT2000 series, designed to optimise operator control and monitoring of device and line status. With vastly increased performance, advanced functions, seamless connectivity to other automation devices and highly intuitive, tablet-like operation\* and the highest quality graphics, the GOT2000 series provides a range of models and sizes to meet the needs of the broadest spread of applications.

With their enhanced functionality, these new HMIs extend capabilities beyond monitoring and visualisation, providing additional features that will help to reduce downtime, enable fast recovery from simple errors, increase availability and boost production efficiency. More than simply displaying data, these enhanced HMIs deliver genuine perspective on the automation process and provide a platform to solve the typical production problems that drive down OEE.

A comprehensive line-up of products provides screen sizes from 8.4" up to 15" (to be expanded to include from 3,7" up to 19" in the future) in two basic ranges: the GT27 for high end applications that demand the highest levels of performance and functionality; and the GT23 for cost-sensitive applications that can now benefit from new benchmark performance standards. In addition, a software HMI version, the GT SoftGOT2000, realises all of the GOT2000 features on a PC or panel computer.

## Seamless gateway to many devices

The GOT2000 offers seamless connectivity to Mitsubishi Electric automation devices such as PLCs, variable speed drives, servo drives and robots, simplifying automation system set up. Inbuilt Ethernet communications means users can operate the GOT2000 remotely from a PC (VNC Server) or even from a tablet or portable terminal. An MES interface option enables the GOT2000 to transmit data collected from PLCs and other automation devices directly to higher level system databases, eliminating the need for gateway PCs or complex programming. Further the GOT2000 comes with the "FA transparent" function that enables users to link from a PC through the HMI to any supported connected automation products.

<sup>\*</sup> Some functions such as Multi-touch/gesture are only available on certain models

#### **Benefits:**

#### Benchmark performance

New high-speed processors deliver responsive HMI operation even during high-load activities such as logging, script, alarm or device data transmission. Monitoring speed and booting time is twice as fast as the previous flagship GOT1000 model.

#### Increased memory size

With memory four times greater than the models they replace, GOT2000 HMIs enable flexible screen design without any concerns regarding data capacity. The product data compression technology plus up to 128 MB with the use of a standard SD card make it possible.

#### Multi-touch/gestures\*

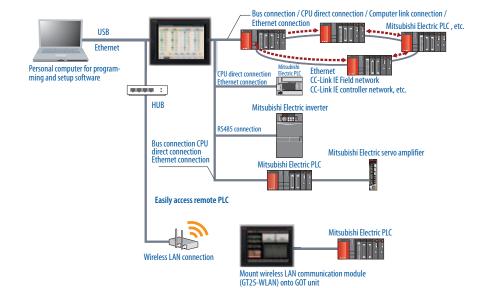
GOT2000 series HMIs deliver tablet-like usability with the introduction of multitouch and gestures, even when wearing gloves. Screen gestures enable users to easily enlarge screens for better visualisation and easy operation of small switches. After enlarging, users can scroll across the display. Object gestures allow specific objects to be enlarged, scrolled or flicked, including historical data lists, alarm displays, trend graphs and documents. GOT2000 screens also allow two-point pressing, for simultaneous operation of two switches on important operations - such as "interlock release" and "start". This eliminates the need for external panel hardware.

#### Beautiful graphics

GOT2000 HMIs provide 65536 colours, and support a wide range of image formats – including PNG – for clear screens with well defined objects that are crisp even when enlarged or reduced. The HMI also supports a library of outline fonts in different sizes.



Reusable sample projects



Simplified startup and debugging

#### Advanced communications

All GOT2000 HMIs provide Ethernet, RS232 and RS422/485 communications. SD card and front and rear USB ports deliver increased flexibility. Options include a wireless LAN interface for communication with PCs and tablets, enabling users to download/upload screen data and use the FA Transparent function.

#### Easy screen design

The new GOT2000 screens are fully compatible with GT Works3 software for screen design, with features such as the ability to use templates and sample projects to greatly reduce the number of steps in the screen creation process. GT Works3 also offers a full suite of common functions, objects and shapes. Help facilities include a "device input assist" function and a search wizard for the GT Works3 manuals.

#### Backwards compatibility

Providing an advanced solution for today's monitoring and visualisation requirements, the GOT2000 HMIs provide significant improvements on the GOT1000 models that they replace, while ensuring backwards compatibility: panel sizes remain identical whilst existing projects can be easily ported to the new HMIs.

#### Horizontal integration

The superior integration capabilities of Mitsubishi Electric factory automation products is demonstrated by functions such as parameter and program backup/restore for PLCs, inverters and servo drives; GOT transparent mode to connect via the HMI to Mitsubishi Electric devices for programming, monitoring etc; pre-made monitor screens for network diagnostics, etc.

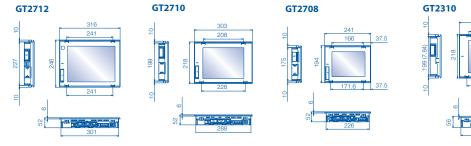


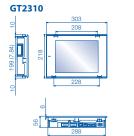
GT Works3 displays your screen assets

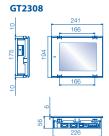
### **Specifications**

Item		GT2712 (4 Models)	GT2710 (6 Models) <sup>⑤</sup>		GT2708 (4 Models)		GT2310 (2 Models)	GT2308 (2 Models)
Display section ① ②	Display device	TFT color LCD						
	Screen size	12.1"	10.4"		8.4"		10.4"	8.4"
	Resolution	SVGA: 800x600 dots	SVGA: 800x600 dots	VGA: 640x480 dots	SVGA: 800x600 dots	VGA: 640x480 dots	VGA: 640	x480 dots
	Display size	246.0 (9.685) (W) x184.5 (7.264) (H) mm (inch)	211.2 (8. x158.4 (6 mm (	.236) (H)	,	.728) (W) 5.047) (H) (inch)	211.2 (8.315) (W) x158.4 (6.236) (H) mm (inch) 170.9 (6.728) (W) x128.2 (5.047) (H) mm (inch)	
	Number of characters	16-dot standard font: 50 chars. x 37 lines 12-dot standard font: 66 chars. x 50 lines	16-dot standard font: 50 chars. x 37 lines 12-dot standard font: 66 chars. x 50 lines	16-dot standard font: 40 chars. x 30 lines 12-dot standard font: 53 chars. x 40 lines	16-dot standard font: 50 chars. x 37 lines 12-dot standard font: 66 chars. x 50 lines	16-dot standard font: 40 chars. x 30 lines 12-dot standard font: 53 chars. x 40 lines	16-dot standard font: 40 chars. x 30 lines 12-dot standard font: 53 chars. x 40 lines	
User memory	User memory capacity	Memory for storage (ROM): 57 MB Memory for operation (RAM): 128 MB Memory for operation (RAM): 9						
Built-in interface	RS-232	1ch Transmission speed: 115200/57600/38400/19200/9600/4800bps Connector shape: D-sub 9-pin (male)						
	RS-422/485	1ch Transmission speed: 115200/57600/38400/19200/9600/4800bps Connector shape: D-sub 9-pin (female)						
	Ethernet	1ch Data transfer method: 10BASE-T/100BASE-TX Connector shape: RJ-45 (modular jack)						
	USB	Maximum transfer speed: High-Speed 480 Mbps Connector shape: USB Mini-B						
	SD card	1ch SDHC compliant (maximum 32 GB)						
Protective structure		Front: IP67f © In control panel: IP2X						

① On LCD panels, bright dots (permanently lit) and black dots (never lit) generally appear. Because the number of display elements that exist on an LCD panel is large, it is not possible to reduce appearance of the bright and black dots to zero. Individual differences in LCD panels may cause differences in color, uneven brightness and flickering. Note that these are characteristics of LCD panels and it does not mean the products are defective or damaged.







Dimensions in mm

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 $<sup>\</sup>ensuremath{^{\circ}}$  Flickering may occur due to vibration or shock depending on the display colors.

<sup>®</sup> Pressing "PUSH" mark firmly and locking the USB environmentally protective cover makes it conform to IP67f. (The USB interface conforms to IP2X when the cover is open.) However, this does not guarantee protection in all users' environments. The unit may not be used in an environment where it is exposed to splashing oil or chemicals for a long time or it is soaked with oil mist.

<sup>@</sup> GT2710-STBA & GT2710-STBD Resolution: SVGA: 800x600 dots. Number of characters: 16-dot standard font: 50 chars. x 37 lines: 12-dot standard font: 66 chars. x 50 lines