

GOT2000 Series

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 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 3.8" up to 15" in four basic ranges: the GT27 for high end applications that demand the highest levels of performance and functionality, the GT25 high performance mid-range model, the GT23 for cost-sensitive applications that can now benefit from new benchmark performance standards and the GT21 as an entry level model. 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.

^{*} Some functions such as Multi-touch/gesture are only available on certain models.

Benefits:

■ Benchmark performance

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*

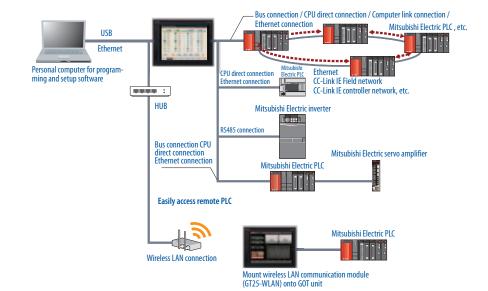
GOT2000 series HMIs deliver tablet-like usability with the introduction of multitouch and gestures, even when wearing gloves. Screen gestures enable users to easily enlarge screens for better visualisation and easy operation of small switches. After enlarging, users can scroll across the display. Object 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 GOT2000 screens are fully compatible with HMI design software GT Works3, 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 HMIs.



GT Works3 displays your screen assets

■ Horizontal integration

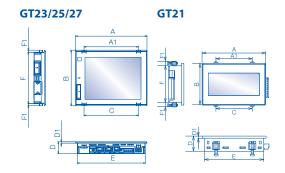
The superior integration capabilities of Mitsubishi Electric factory automation products is demonstrated by functions such as parameter and program backup/restore for PLCs, inverters and servo drives; GOT transparent mode to connect via the HMI to Mitsubishi Electric devices for programming, monitoring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

Specifications

Item		GT2715 (2 Models)	GT2712 (4 Models)			GT2708 (4 Models)		GT2510 (4 Models)	GT2508 (4 Models)	GT2310 (2 Models)	GT2308 (2 Models)	GT2103 (2 Models)	
	Display device		TFT color LCD								TFT (monochrome)		
Display section ① ②	Screen size		15"	12.1"	10.4"		8.4"		10.4"	8.4"	10.4"	8.4"	3.8"
	Resolution		1024x768	800x600	800x600	640x480	800x600	640x480	640x480		640x480		320x128
	Display size WxH (mm)		304.1x228.1	246.0x184.5	211.2	x158.4	170.9	x128.2	211.2x158.4	170.9x128.2	211.2x158.4	170.9x128.2	89.0x35.6
	Number of characters (chars. x lines)			50x37 (16 dot) 66x50 (12 dot)							40x30 (16 dot) 53x40 (12 dot)		20x8 (16 dot) 26x10 (12 dot)
User	Memory for storage (ROM)		57 MB					32 MB		9 MB		3 MB	
memory	Memory for operation (RAM)		128 MB					80 MB		9 MB		_	
Built-in interface	RS232 Transmission speed Connector shape		1 ch: 115200/57600/38400/19200/9600/4800bps										
			D-sub 9-pin (male)								MINI-DIN6-pin (female) (GT2103-PMBD: none)		
	RS422/ Tr	ransmission speed	1 ch: 115200/57600/38400/19200/9600/4800bps										
	485 (c	onnector shape	D-sub 9-pin (female)								Terminal block 9-pin (GT2103-PMBD: 5-pin)		
	Ethernet		1 ch Data transfer method: 10BASE-T/100BASE-TX Connector shape: RJ-45 (modular jack) (GT2103-PMBDS: none)										
	USB		Maximum transfer speed: High-Speed 480 Mbps, Connector shape: USB Mini-B									Max. transfer speed: Full-Speed 12 Mbps, USB Mini-B	
	SD card		1 ch SDHC compliant (maximum 32 GB) (GT2103: card slot optional)										
Protective structure			Front: IP67f ^③ 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



Туре	А	A1	В	C	D	D1	E	F	F1	
GT2715	397	322	300	322	60		382	281		
GT2712	316	241	246	241	52	F2		301	227	
GT2710/2510	303	208	218	228		6	288	199	10	
GT2310					56					
GT2708/2508	- 241	166	194	171.6	52		226	175		
GT2308				166	56					
GT2103	113	64	74	64	27	4	104	65	9.5	

All dimensions in mm

Mitsubishi Electric Europe B.V. Gothaer Straße 8 D-40880 Ratingen Phone: +49 (0)2102 / 486-0	Germany	Mitsubishi Electric (Russia) LU 52, bld. 1 Kosmodamianskaya er RU-115054 Moscow Phone: +7 495 / 721 2070
Mitsubishi Electric Europe B.V. Radlická 751/113e Avenir Business Park CZ-158 00 Praha 5 Phone: +420 251 551 470	Czech Rep.	Mitsubishi Electric Europe B.V. Carretera de Rubí 76-80 Apdo. 4: E-08190 Sant Cugat del Vallés Phone: +34 (0) 93 / 5653131
Mitsubishi Electric Europe B.V. 25, Boulevard des Bouvets F-92741 Nanterre Cedex Phone: +33 (0)1 / 55 68 55 68	France	Mitsubishi Electric Europe B.V. (Sc Fjellevägen 8 SE-22736 Lund Phone: +46 (0) 8 625 10 00
Mitsubishi Electric Europe B.V. Viale Colleoni 7 Palazzo Sirio I-20864 Agrate Brianza (MB) Phone: +39 039 / 60 53 1	Italy	Mitsubishi Electric Turkey Elektrik Şerifali Mahallesi Nutuk Sokak N TR-34775 Ümraniye-İSTANBU Phone: +90 (0)216 / 526 39 90

Mitsubishi Electric Europe B.V. Westgate Business Park, Ballymoun IRL-Dublin 24 Phone: +353 (0)1 4198800 Mitsubishi Electric Europe B.V. Nijverheidsweg 23a NL-3641RP Mijdrecht Phone: +31 (0) 297250350

Mitsubishi Electric Europe B.V. PL-32-083 Balice Phone: +48 (0) 12 347 65 00

European Offices

Mitsubishi Electric (Russia) LLC	Russia
52, bld. 1 Kosmodamianskaya emb.	
RU-115054 Moscow	
Phone: +7 495 / 721 2070	
Mitsubishi Electric Europe B.V.	Spain
Carretera de Rubí 76-80 Apdo. 420	
E-08190 Sant Cugat del Vallés (Barcelona)	
Phone: ±34 (0) 03 / 5653131	

Ürünleri A.Ş. Turke ali Mahallesi Nutuk Sokak N

TR-34775 Ümraniye-İSTANBUL Phone: +90 (0)216 / 526 39 90 Mitsubishi Electric Europe B.V.

Mitsubishi Electric Europe B.V. Dubai Silicon Oasis **United Arab Emirates - Dubai** Phone: +971 4 3724716

Representatives

GEVA Wiener Straße 89 A-2500 Baden Phone: +43 (0)2252 / 85 55 20	Austria	Beijer Electr Lykkegardsve DK-4000 Ro Phone: +45
000 TECHNIKON Prospect Nezavisimosti 177-9 BY-220125 Minsk Phone: +375 (0) 17 / 393 1177	Belarus	HANS FØLSO Theilgaards T DK-4600 Kø Phone: +45
ESCO DRIVES Culliganlaan 3 BE-1831 Diegem Phone: +32 (0)2 / 717 64 60	Belgium	Beijer Electr Pärnu mnt. 16 EE-11317 Ta Phone: +372
KONING & HARTMAN B.V. Woluwelaan 31 BE-1800 Vilvoorde Phone: +32 (0)2 / 257 02 40	Belgium	Beijer Electr Vanha Nurmi FIN-01670 V Phone: +358
INEA RBT d.o.o. Bosnia and He Stegne 11 SI-1000 Ljubljana Phone: +386 (0) 1/513 8116	rzegovina	PROVENDOF Teljänkatu 8 / FIN-28130 F Phone: +358
AKHNATON 4, Andrei Ljapchev Blvd., PO Box 21 BG-1756 Sofia Phone: +359 (0)2 / 817 6000	Bulgaria	UTECO A.B.E 5, Mavrogen GR-18542 P Phone: +30
INEA CR Losinjska 4 a HR-10000 Zagreb Phone: +385 (0)1 / 36 940 - 01/-0	Croatia	MELTRADE H Fertő utca 14 HU-1107 Bu Phone: +36
AutoCont C.S. S.R.O. Czech Kafkova 1853/3 CZ-702 00 Ostrava 2 Phone: +420 595 691 150	Republic	TOO Kazproi Ul. Zhambyla KAZ-100017 Phone: +7 7

ronics A/S vej 17 **oskilde** 5 (0)46/757666 GAARD A/S ge 4320 8600 ronics Eesti OÜ **allinn** 2 (0)6 / 51 81 40 tronics OY mijärventie 62 Vantaa 8 (0)207 / 463 500 R OY **Pori** 58 (0) 2 / 522 3300 Piraeus (0)211 / 1206-900 Kft. udapest 5 (0) 1 / 431-9726

Beijer Electronics SIA Latvia Sirius Trading & Services Ritausmas iela 23 **LV-1058 Riga** Phone: +371 (0)6 / 784 2280 Beijer Electronics UAB Goštautų g. 3 LT-48324 Kaunas Phone: +370 37 262707 ALFATRADE Ltd. 99, Paola Hill **Malta-Paola PLA 1702** Phone: +356 (0)21 / 697 816 INTEHSIS SRL bld. Traian 23/1 MD-2060 Kishinev Phone: +373 (0)22 / 66 4242 HIFLEX AUTOM. B.V. Wolweverstraat 22 NL-2984 CD Ridderkerk KONING & HARTMAN B.V. Energieweg 1 NL-2627 AP Delft Phone: +31 (0)15 260 99 06 Beijer Electronics AS NO-3002 Drammen R. João Francisco do Casal 87/89 **PT-3801-997 Aveiro, Esgueira** Phone: +351 (0)234 / 303 900

INEA SR d.o.o. UI. Karadjordjeva 12/217 SER-11300 Smederevo Phone: +386 (026) 461 54 01 SIMAP SK Jána Derku 1671 **SK-911 01 Trenčín** Phone: +421 (0)32 743 04 72 INEA RBT d.o.o. Stegne 11 SI-1000 Ljubljana Phone: +386 (0)1 / 513 8116 Beijer Electronics Automation AB Swed Box 426 SE-20124 Malmö Phone: +46 (0) 40 / 35 86 00 Im Schörli 5 CH-8600 Dübendorf Phone: +41 (0)44 / 802 28 80 000 "CSC-AUTOMATION" 4-B, M. Raskovoyi St. UA-02660 Kiev Phone: +380 (0)44 / 494 33 44

iia	ILAN & GAVISH Ltd. 24 Shenkar St., Kiryat Arie IL-49001 Petah-Tikva Phone: +972 (0)3 / 922 18 24	Israe
ia	GIRIT CELADON Ltd. 12 H'aomanut Street IL-42505 Netanya Phone: +972 (0)9 / 863 39 80	Israe
ia	CEG LIBAN Cebaco Center/Block A Autostra Lebanon-Beirut Phone: +961 (0)1 / 240 445	Lebano i de DORA
ia en	ADROIT TECHNOLOGIES 20 Waterford Office Park 189 Wir ZA-Fourways Phone: + 27 (0)11 / 658 8100	South Africa tkoppen Road





 $[\]ensuremath{^{@}}$ Flickering may occur due to vibration or shock depending on the display colors.

[®] 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.

[©] 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