

**HMI – HumanMachineInterface**

Date: Jan 2010

**Product line: GOT1000  
GT12 series**

Contact Hugh Tasker  
: hugh.tasker@meuk.mee.com

**GT12 Series –  
Cost effective, large-size, built-in Ethernet**

*GT1265-VNBA – 8.4” 256 colour VGA model  
GT1275-VNBA – 10.4” 256 colour VGA model*



Mitsubishi Electric Automation introduces an all new series of displays for the GOT1000 platform, the GT12 Series.

- What is it?**  
 The GT12 Series is the latest 4th generation GOT1000 platform HMI adding a new dimension for customers specifying complete automation solutions. In today's cost conscious market, this new GOT series is provides, not only additional terminal and display options between 8" and 10", but a powerful high functionality HMI solution on a cost sensitive basis. By integrating all the essential interfaces, features and functions into a single HMI package, hidden hardware costs and system complexity are eliminated saving development time and overall project costs. The terminals also include the powerful PLC Backup and restore function for FX and Q PLCs first seen on the GT15/16 range.

This new series interfaces fully with Mitsubishi products as well as other 3<sup>rd</sup> party products (e.g. Modbus TCP/RTU) offering supporting connections for two different drivers. GT12 Terminals have an impressive feature set and many of the advance maintenance and debugging functions available in our more advanced GT16 and GT15 Series GOT products.



Mitsubishi Electric Europe B.V. /// Automation Systems Division /// Travellers Lane /// Hatfield /// Herts /// AL10 8XB /// UK  
 Tel: +44 1707 276100 /// Fax: +44 1707 278695 /// Email: automation@meuk.mee.com /// Web: www.mitsubishi-automation.co.uk

- **GT12 Series functionality**

Standard functions include multi-language and Unicode support, basic recipe and alarm management, security and password protection, data logging and historical trending, backup and restore capabilities, scripting and the multi-channel function. The GT12 Series shares a lot of commonality with our existing GT16 Series platforms such as the highly enhanced CPU and graphics engine, integrated communications (RS232/422/485/Ethernet/rear mounted USB), compact flash and 6MB of built-in flash memory.

The GT12 Series vivid 256 color TFT display includes a VGA resolution (640\*480) in both the 8.4” and 10.4” models.

Benefits	Technical specification
Bright displays for very good readability. High screen resolution for clear graphical presentation of machine data with high information density.	GT1265-VNBA and GT1275-VNBA offer 256 colour TFT displays with a high intensity of 200cd/m².
Efficient and fast programming with GT Designer3 software through USB. Saves time, makes data access faster and work more effective. Provides flexible communication possibilities.	USB Programming port (on the back),  RS232 and RS422 communication ports on board (standard 9-pin DSUB connector types)
Access Mitsubishi PLCs and Inverters through the GOT with the same USB cable.	Transparent Mode (Mitsubishi Electric FA-Equipment can be programmed through the GT12 models)
Very high design freedom and extensive use of graphical information	Large project memory of 6 MB, maximum 1024 screens
Easy troubleshooting, additional background information in case of machine problems in up to 10 different languages	Alarm handling with Multilanguage support
Provide machine safety, separate between operations for normal users and administrators (e.g. password-protected screens for maintenance)	Security via passwords (15 levels)
Use HMI as a multiple language interface and support export oriented customers	Unicode 2.1 support, all Asian and East-European character sets can be displayed
Support different operators with their own native language and support up to 10 languages in the HMI project	Online language switching
Create additional local machine operation at minimum additional cost	Use Multidrop Master unit GT01-RS4-M to connect up to 16 GOTs to one FX or Q PLC with RS485 network (see separate product information!)
Long term availability and compatibility as Mitsubishi Electric philosophy	GT15 and GT11 cables can be used for GT12 (using built-in RS232 and RS422/485 interfaces) Cut-out compatibility to GT15/GT16 8.4 and 10.4 inch models
Diagnostics and maintenance tools on board, no extra PC for troubleshooting required.	System Monitor function; List Editor for APLC and FXPLC; PLC Backup and restore function for FX and Q PLCs
Support serial machine builders and OEM customers with easy-to-use functions	Project transfer via CF-cards provides a convenient way to download/upload HMI projects without PC. “Transfer Tool” (comes with every GT Works CD as a free tool) for the end-customer to up- and download existing projects using standard USB cables.

- **Software requirements**

- GT Works 3 is required to program the GT12 models.

- **Available cables**

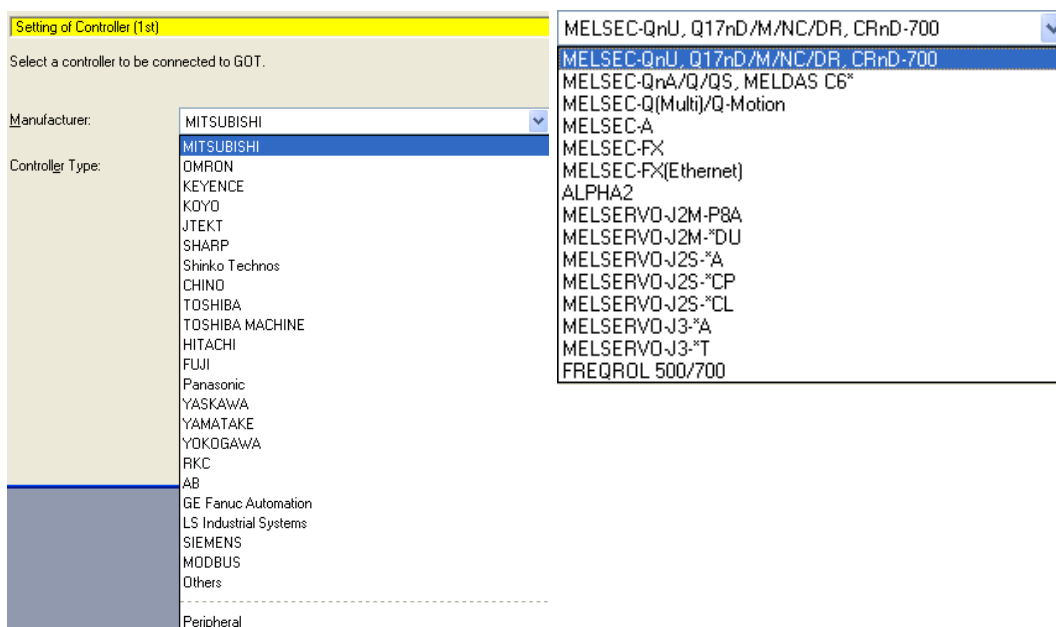
- GT15 and GT11 cables can be used for GT12 (using built-in RS232 and RS422/485 interfaces)

- **Expandability**

- The GT12 It is an all-in-one-model and is not expandable.

• Available drivers for all GT12 models

- MELSEC FX (FX3G, FX3U and old types), AnS, QnAS, System Q, new QnUDE CPUs
- CRnD-700 Robot CPU connection, C70 CNC connection, Motion controller CPU support
- All Mitsubishi Inverter types (one GT12 can control up to 10 inverters in RS485 network)
- GT12 models can connect not only to Siemens S7-200, but also to S7-300 and S7-400 using the HMI adapter
- GT12 models can be connected to CC-Link networks using the AJ65BT-G4-S3 module with RS422 interface.
- Modbus RTU and TCP driver support – connect up to 32 Modbus slaves to one GT11



• Available products

**New GOT products**

GT Works3 V01-1LOC-E	230020	Visualisation-SW for GOT1000+SoftGOT1000;engl;MELSOFT Pack with CD;1 pc
GT Works3 V01-1LOC-E_2&More	230021	Visualisation-SW for GOT1000+SoftGOT1000;engl;from second license;CD only;1 pc
GT Works3 V01-1LOC-E-UP	230022	Visualisation-SW for GOT1000+SoftGOT1000;engl;MELSOFT Upgrade Pack with CD;1 pc
GT Works3 V01-1LOC-E-UPD	230023	Visualisation-SW for GOT1000+SoftGOT1000;engl;MELSOFT Update CD;1 pc
GT1275-VNBA	229836	GOT Graphical Touch terminal; 10.4" TFT/256 col.;640x480 pixels, DC24V, Ethernet
GT1265-VNBA	229837	GOT Graphical Touch terminal; 8.4" TFT/256 col.;640x480 pixels, DC24V, Ethernet
GT12-70VLTN	229838	GOT Backlight for 10.4" TFT-display, GT12 type
GT12-60VLTN	229839	GOT Backlight for 8.4" TFT-display, GT12 type
GT11-70PSCB	229840	GOT Protect film sheets (Clear) ;Set (5 pcs) for GT12 10.4"
GT11-60PSCB	229841	GOT Protect film sheets (Clear) ;Set (5 pcs) for GT12 8.4"

**Existing GOT products**

GT09-C20USB-5P	166373	USB programming cable for GOT1000-Series; 2m
GT01-C10R4-8P	163949	GOT Connection cable for CPU (MELSEC FX series) and GOT1000-series HMIs; 1 m
GT01-C30R4-8P	163948	GOT Connection cable for CPU (MELSEC FX series) and GOT1000-series HMIs; 3 m
GT01-C100R4-8P	163950	GOT Connection cable for CPU (MELSEC FX series) and GOT1000-series HMIs; 10 m
GT01-C200R4-8P	163951	GOT Connection cable for CPU (MELSEC FX series) and GOT1000-series HMIs; 20 m
GT01-C30R2-6P	163959	Connection cable QCPU and GOT1000-series, 3m
GT01-C30R4-25P	163953	Connector cable between MELSEC FX Serie RS232 / QnA CPU Port RS422 with 25pin D-SUB and GOT1000
GT01-C100R4-25P	163954	Connector cable between MELSEC FX Serie RS232 / QnA CPU Port RS422 with 25pin D-SUB and GOT1000
GT01-C200R4-25P	163955	Connector cable between MELSEC FX Serie RS232 / QnA CPU Port RS422 with 25pin D-SUB and GOT1000
GT01-C300R4-25P	163956	Connector cable between MELSEC FX Serie RS232 / QnA CPU Port RS422 with 25pin D-SUB and GOT1000
GT05-MEM-128MC	166321	CF Card with 128MB memory for GOT1000-Series
GT05-MEM-256MC	166322	CF Card with 256MB memory for GOT1000-Series
GT05-MEM-512MC	221377	CF Card with 512MB memory for GOT1000-Series
GT05-MEM-1GC	221378	CF Card with 1GB memory for GOT1000-Series
GT05-MEM-2GC	221379	CF Card with 2GB memory for GOT1000-Series
GT05-MEM-ADPC	166323	Adapter for using CF cards in a PCMCIA Slot