Human Machine Interface

HM series and GT series

IN Your Innovation

IN Your Innovation

CONTENT

IN Your Innovation

Panasonic HMIs - more than just touch terminals

The current industrial revolution requires seamless communication between man and machine. Of central importance for successful networking is the machine's operating device, which serves as the communication interface.

The logical visualization of the processes and data on the display is essential for the system's intuitive and error-free operation and the production itself.

Thanks to the web-server architecture of the latest HMI from Panasonic Industry, the operator has a wide range of options for controlling and remote monitoring of the machines and can access the machine from a PC, tablet, or smartphone.

Quality that you can see
Our high-performance displays deliver brilliant images. Individually adjustable parameters such as brightness and contrast guarantee maximum readability.

In addition, all LCDs offer a wide viewing angle. The compact housings and the extremely resistant front foils are evidence of robust design.
All touch terminals comply with the relevant international standards and guidelines. As with all Panasonic products, the touch terminals are subjected to extreme tests that far exceed the usual requirements. Carefully selected components and materials guarantee a long life cycle.

Application examples:
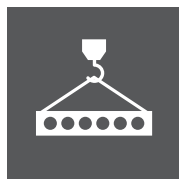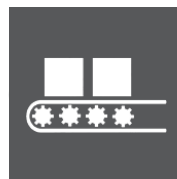
Machine automation

Machine builders

Packaging

Metal processing

Liquid dispensers

Positioning systems

Material handling

Printing machines

Service

Panasonic Industry Europe's comprehensive service includes

> an expert hotline,
> workshops and
> on-site service,

to ensure the reliable and effective use of our touch panels.

HM SERIES

**HMs700 series –
smart & innovative**

NEW!

> PoE (Power over Ethernet)
> Multitude of installation topologies
> Wi-Fi connection
> Internal temperature sensor

**HMx700 series –
high-end multi-touch**

> Capacitive glass touch panel
> UV resistant, scratch resistant, resistant to chemicals
> Three Ethernet ports
> Display size 5", 7", 10.1", 15.6" and 21.5"

HMe series – economical

> A top product in its class
> Inexpensive
> Configurable serial interface
> Reliable
> Industrial grade

PoE (HMs700)

Power over Ethernet

✔ Maximum connectivity thanks to standard CAT5 wiring
✔ Only one cable needed (power and Ethernet)
✔ Up to 100m distance from source

MQTT (all models)

Message Queuing Telemetry Transport

✔ Designed for connections with remote locations
✔ Suitable for limited network bandwidth

Fanless (HMs & HMx)

Passive cooling

✔ Protection against dust, oil and splash water
✔ Low maintenance
✔ Noiseless

OPC UA (all models)

Standardized communication protocol

✔ Platform-independent exchange of machine data

**Wide variation
of mountings (HMs700)**

VESA, wall, tube, gooseneck, table stand

✔ High flexibility for installation

**Web server
architecture (all models)**

Based on the current HTML5 web technology

Supports VNC technology

✔ Offers many possibilities of remote monitoring and control

**Wi-Fi (HMs700 series
except HMs705)**

Wireless Local Area Network

✔ Ease of installation and use
✔ Offer wireless access to employees and customers
✔ Connection to the wider Internet

**Full IP67 degree of
protection (HMs700)**

The complete encapsulation enables the HMI to be installed under difficult environmental conditions

✔ Ideal for mounting with a swivel arm directly to the machine.
✔ Cost-efficient

**MULTI-TOUCH FUNCTION
(HMs & HMx)**

Logical visualization of processes and data

✔ Avoidance of incorrect operation due to intuitive operation of the system

USER-FRIENDLY

**Play videos
Read PDFs
Zoom
Extremely fast writing
Operation with protective gloves**

✔ High user ergonomics and comfort in daily work

HMWIN STUDIO

Configuration software:

Same tool for all HM series touch panels (and for FP-I4C)

Editor

Symbol gallery

Navigation

Property manager

JavaScript

Help
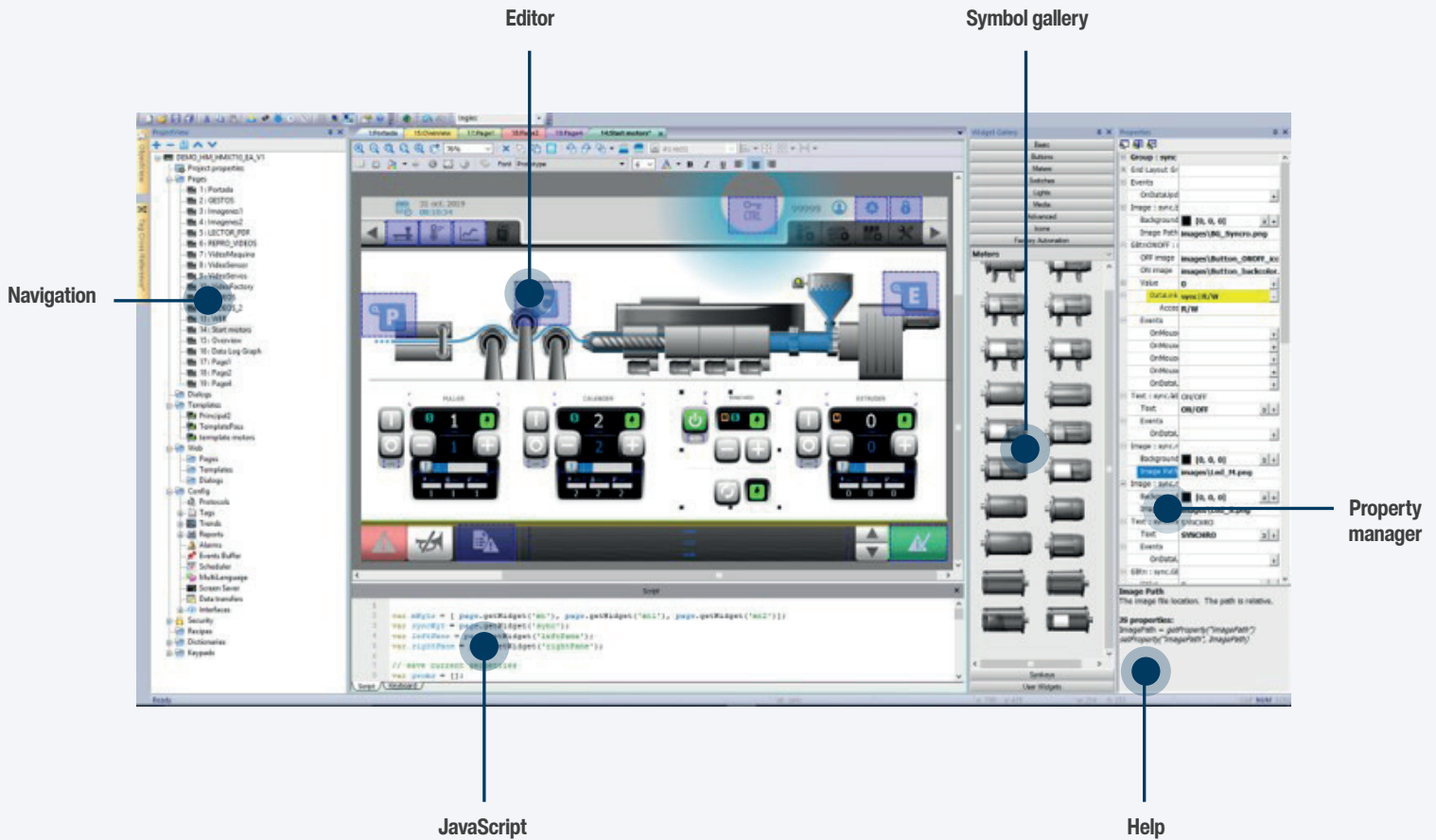
> Multi-protocol capability
> Cloud-ready
> HTML5 web technology

> VNC technology (Virtual Network Computing)
> CFR21 Part 11; FDA Compliance

> Powerful web terminal with industry standard web engine
> OPC UA standard

> Simple and intuitive software interface
> OS Linux RT

HMs700 series– smart & innovative

NEW!

Features

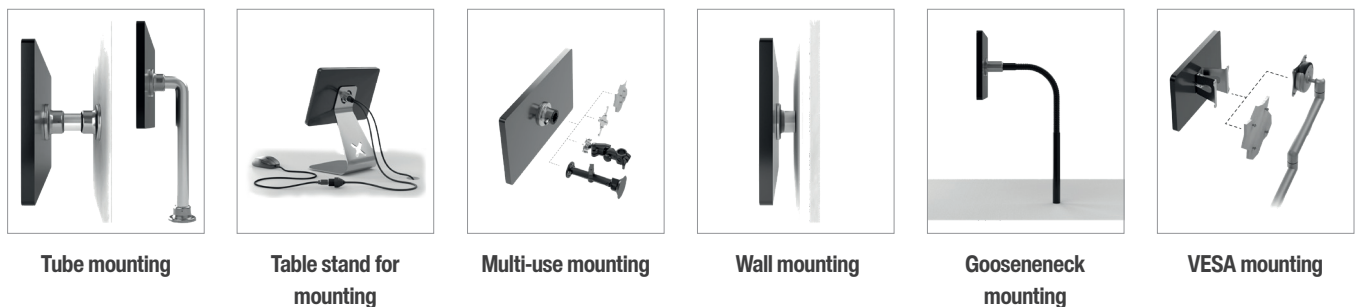> Multi touch, projected capacitive touch screen (PCAP)

> Display sizes: 5", 7", 10.1", 15.6", and 21.5"
> Real-time clock
> Dimming to 0%

> Extended operation temperature range: -20 to +55 degree Celsius

> 1 x PoE (Power over Ethernet)
> 1 x optional USB (via special cable)

Model	HMs705	HMs707	HMs710	HMs715	HMs721
Display size	5" TFT	7" TFT	10.1" TFT	15,6" TFT	21.5" TFT
Resolution	800 x 480, PCAP	1024 x 600, PCAP	1280 x 800, PCAP	1366 x 768, PCAP	1920 x 1080, PCAP
Sensors	Temperature, 3-axis accelerometer				
Wi-Fi	Not available	IEEE 802.11a/b/g			
Brightness	300cd/m^2 typ.	400cd/m^2 typ.			
Touchscreen	Projective capacitive touch glass, multi-touch				
Ethernet	10/100 PoE				
USB	1 (host V2.0, max. 500mA, available with special cable)				
Protection Class	IP67 (requires appropriate accessories and cables)				
CPU	ARM Cortex-A9 dual core - 800MHz		ARM Cortex-A9 quad core - 800MHz		
Operating system	Linux RT				
RAM / FLASH / FRAM	1GB / 4GB / 64KB		2GB / 8GB / 64KB		

Installation: The wide variation of mountings offers a high flexibility for installation

Tube mounting

Table stand for mounting

Multi-use mounting

Wall mounting

Gooseneneck mounting

VESA mounting

HMX700 SERIES

HMx700 – high-end series with multi-touch functions

The series combines the best of two worlds: The HMx700 panel is a high-end touch panel for demanding IoT applications that, despite its wide range of features, does not compromise on durability.

Features

> Capacitive glass touch panel
> Display sizes: 5", 7", 10.1", 15.6", and 21.5"
> Fast start < 10 seconds

> UV resistant
> Scratch resistant
> Resistant to many chemicals
> Three Ethernet ports

> Multi-protocol capability
> Gateway to Corvina Cloud
> OPC UA standard
> VNC technology

> Extended operation temperature range: -20 to +60 degree Celsius

Model	HMx705	HMx707	HMx710	HMx715	HMx721
Display size	5" TFT 16:9	7" TFT 16:9	10.1" TFT 16:9	15.6" TFT 16:9	21.5" TFT 16:9
Resolution	800 x 480, PCAP	800 x 480, PCAP	1280 x 800,PCAP	1366 x 768, PCAP	1920 x 1080, PCAP
Backlight	LED				
Brightness	300 cd/m^2 typ.	500 cd/m^2 typ.		400 cd/m^2 typ.	300 cd/m^2 typ
Dimming	Yes				
Colors	64K	16M			
Touchscreen	Capacitive glass, multi-touch				
Portrait mode	Yes				
Serial port (Universal)	RS232, RS485, RS422, software configurable				
Ethernet port	2x 10/100Mbit	3x 10/100Mbit			
USB port	1 (host V2.0, max. 500mA)	2 (host V2.0, max. 500mA)			
CPU	ARM Cortex-A8 1GHz	ARM Cortex-A9 dual core 800MHz		ARM Cortex-A9 quad core 800MHz	
RAM / flash memory	512MB / 4GB	1GB / 4GB		2GB / 8GB	

HMe series – economical

The HMe series, the ideal choice for all applications – everywhere. The HMe touch terminals, where e stands for economy version, work with our powerful HMWIN Studio software. Economy version means that the hardware has been stripped down to the essential components, making the touch panel a leader in its class.

Features

> Resistive touch terminal
> Display sizes: 4.3", 7", 10.1"
> Wide color display for all models
> CE, cULus

> Powerful and intuitive programming with HMWIN Studio software
> 3 years warranty
> 1 Ethernet port

> Software-configurable serial port: RS232C/RS422/RS485
> 1 USB port with host interface version 2.0

> Operation temperature range:
0 to +50 degree Celsius

Model	HMe04	HMe07	HMe10
Display size	4.3" TFT 16:9	7" TFT 16:9	10.1" TFT 16:9
Resolution	480 x 272, WVGA	800 x 480, WVGA	1024 x 600, WVGA
Backlight	LED		
Brightness	200 cd/m^2 typical		
Dimming	Yes		
Colors	64K		
Touchscreen	Analog resistive		
Portrait mode	Yes		
Serial port (Universal)	RS232, RS485, RS422, software configurable		
Ethernet port	1x 10/100Mbit		
USB port	1 host interface V2.0		
CPU	ARM Cortex A8 1GHz		
User memory	2GB flash memory	4GB flash memory	

Cloud solution for the HM series

Corvina Cloud is a safe cloud solution based on OpenVPN and SSL and allows remote administration of industrial installations. This way, you have a platform making the administration of your IIoT business easy.

How does Corvina Cloud work?

| ROLES/PERMISSIONS | APPLICATIONS | SECURE CONNECTIVITY | HMI/PLC GATEWAYS | ENDPOINTS |
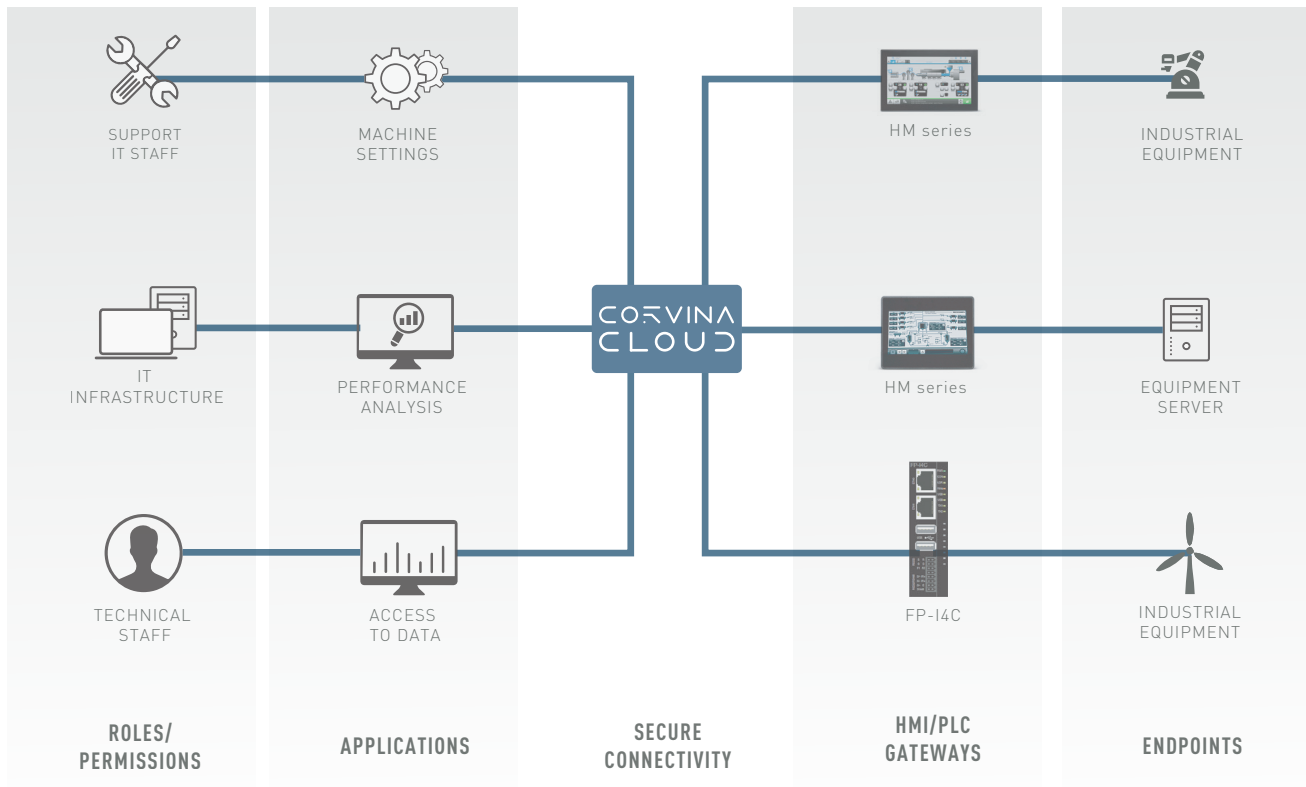
Roles & applications

It is possible to define different roles with different user rights. Roles can be given access rights depending on the data needed and the application.

Secure connectivity

In its core, Corvina Cloud is a high-performance server with the latest open technologies to manage data and control flows, thus acting as a Platform as a Service (PaaS).

Gateways & endpoints

Our touch panels (HMe series, HMx700 series, HMs700 series) serve as gateways to the local network. Panasonic PLCs, IP cameras, and other devices capable of connecting to the Internet can act as endpoints.

GT SERIES

GT707

progressing towards a new dimension

The extremely user-friendly touch panel provides more display space while maintaining a slim design.

> **> TFT color screen for excellent life-like images**

The comfortable widescreen LCD (800 x 480 pixels) displays images in high contrast without distracting dots or lines.

> **> Status monitor**

The GT707 offers an easy way to check the status of all connected devices at one glance.

GT703/GT704

with built-in Ethernet port

Use the GT703/704 series to display and simultaneous log data with multiple PLCs from the FP or FP7 series in a network. Data from PLC programs and registers can be saved to the GT's internal memory or on SD memory cards.

> **> Edit screens & PLC programs via Ethernet**

Another feature is the possibility to edit data on multiple GT touch terminals or change PLC programs via Ethernet communication.

> **> Easy data acquisition via Ethernet**

With a dedicated software tool it is possible to read data from the GT touch terminals and their SD memory cards. Information from multiple touch terminals can be transferred to a host PC via Ethernet.

GT03-E/GT32-E

tough touch terminal for applications under rough conditions

An HMI optimally suited for applications under difficult temperature conditions. The touch terminal can be used outdoors within a temperature range of -20°C to +60°C. The legibility of complex displays is guaranteed, even in direct sunlight. It is well suited to the demands placed on automation products, especially for car washing machines, coin-operated parking or food filling machines.

GT02/05/12 –

compact panels with real-time clock

The brilliant displays provide clear and vivid pictures and are mounted in a body with an IP67 degree of protection. The touch terminals can be installed both horizontally and vertically.

GT32-R

a clear and beautiful display

A clearly readable display thanks to a high-definition, long-life LED backlight. The touch terminal comes with a USB interface and an SD card slot as standard equipment.

HM SERIES - TECHNICAL DATA

HMs700

Description	Part number
HMs705 touch terminal 5" TFT widescreen, multi touch, capacitive glass, -20° to +55°C, 16M colors, 800x480 pixels, 1 x USB host, 1 x LAN 10/100 PoE	AIHMs705
HMs705 touch terminal 7" TFT widescreen, multi touch, capacitive glass, -20° to +55°C, 16M colors, 1024x600 pixels, 1 x USB host, 1 x LAN 10/100 PoE, Wi-Fi	AIHMs707
HMs710 touch terminal 10.1" TFT widescreen, multi touch, capacitive glass, -20° to +55°C, 16M colors, 1280x800 pixels, 1 x USB host, 1 x LAN 10/100 PoE, Wi-Fi	AIHMs710
HMs715 touch terminal 15.6" TFT widescreen, multi touch, capacitive glass, -20° to +55°C, 16M colors, 1366x768 pixels, 1 x USB host, 1 x LAN 10/100 PoE, Wi-Fi	AIHMs715
HMs721 touch terminal 21.5" TFT widescreen, multi touch, capacitive glass, -20° to +55°C, 16M colors, 1920x1080 pixels, 1 x USB host, 1 x LAN 10/100 PoE, Wi-Fi	AIHMs721

HMx700

Description	Part number
HMx705 touch terminal 5" TFT widescreen, multi touch, capacitive glass, -20° to +60°C, 64K colors, 800x480 pixels, WVGA, SD card slot, 1 x RS232/485, 1 x USB host, 2 x LAN 10/100	AIHMx705
HMx707 touch terminal 7" TFT widescreen, multi touch, capacitive glass, -20° to +60°C, 16M colors, 800x480 pixels, WVGA, SD card slot, 1 x RS232/485, 2 x USB host, 3 x LAN 10/100	AIHMx707
HMx710 touch terminal 10.1" TFT widescreen, multi touch, capacitive glass, -20° to +60°C, 16M colors, 1280x800 pixels, WXGA, SD card slot, 1 x RS232/485, 2 x USB host, 3 x LAN 10/100	AIHMx710
HMx715 touch terminal 15.6" TFT widescreen, multi touch, capacitive glass, -20° to +60°C, 16M colors, 1366x768 pixels, HD SD card slot, 1 x RS232/485, 2 x USB host, 3 x LAN 10/100	AIHMx715
HMx721 touch terminal 21.5" TFT widescreen, multi touch, capacitive glass, -20° to +60°C, 16M colors, 1920x1080 pixels, full HD, SD card slot, 1 x RS232/485, 2 x USB host, 3 x LAN 10/100	AIHMx721

HMe

Description	Part number
HMe04 touch terminal 4,3" 16:9 LED widescreen, 64K colors, 480x272 pixels, 1 x 1 RS232/422/485, 1 x USB host, 1 x LAN 10/100	AIHME04
HMe07 touch terminal 7" 16:9 LED widescreen, 64K colors, 800x480 pixels, 1 x 1 RS232/422/485, 1 x USB host, 1 x LAN 10/100	AIHME07
HMe10 touch terminal 10.1" 16:9 LED widescreen, 64K colors, 1024x600 pixels, 1 x RS232/422/485, 1 x USB host, 1 x LAN 10/100	AIHME10

HM series accessories

Description	Part number
Communication cable RS232 FP0R/FP-X/FP□ (Sigma)/FP7 COM Port (single wires) <-> HM series touch terminals (9-pin Sub-D), 2m	AIHM8023220
Communication cable RS485 FP0R/FP-X/FP□ (Sigma)/FP7 COM Port (single wires) <-> HM series touch terminals (9-pin Sub-D), 2m	AIHM8048520
Communication cable RS232 FP PLC TOOL port (mini DIN) <-> HM series touch terminals (9-pin Sub-D), 2m	AIHM8123220
Communication cable RS232 FP PLC TOOL port (mini DIN) <-> HM series touch terminals (9-pin Sub-D), 4.0m	AIHM812324
License for a secure VPN connection to the Corvina Cloud	AFPSCLOUDENABLER
Additional communication cassette with serial RS232 port for HM series touch terminals	AIHMPLCM03
Additional communication cassette with serial RS485 port for HM series touch terminals	AIHMPLCM04

GT SERIES - TECHNICAL DATA

GT707 / GT703/704

Description	Part number
Touch terminal GT707, 7", TFT LCD, 65536 colors, IP65, 800x480 pixels, RS232 9-pin Sub-D + USB mini-B (prog.), 24V DC, SD/SDHC card slot, black frame	AIG707WCL1G2
Touch terminal GT703 3.8", 64 gray scales, 480x192 pixels, Ethernet + RS232 + USB mini-B (prog.), 24V DC, black frame, LED backlight: green, red, orange, SD card slot	AIG703WGN1B2
Touch terminal GT703 3.8", 64 gray scales, 480x192 pixels, Ethernet + RS232 + USB mini-B (prog.), 5V DC (power cannot be supplied from a PLC's TOOL port), black frame, LED backlight: green, red, orange, SD card slot	AIG703WGN1B5

GT03-E/32-E

Description	Part number
Touch terminal GT03M-E 3.5", IP67, -20°C to + 60°C, UV resistant, anti-glare layer, monochrome, 320x240 pixels, RS232 + USB mini-B (prog.), 24V DC, silver frame	AIG03MQ03DE
Touch terminal GT03T-E 3.5", IP67, -20°C to + 60°C, UV resistant, anti-glare layer, 4096 colors, 320x240 pixels, RS232 + USB mini-B (prog.), 24V DC, SD/SDHC card slot, silver frame	AIG03TQ13DE
Touch terminal GT32M-E 5.7", IP67, -20°C to + 60°C, UV resistant, anti-glare layer, monochrome, 320x240 pixels, RS232 + USB B (prog.), 24V DC, SD/SDHC card slot, silver frame	AIG32MQ03DE
Touch terminal GT32T-E 5.7", IP67, -20°C to + 60°C, UV resistant, anti-glare layer, 4096 colors, 320x240 pixels, RS232 + USB B (prog.), 24V DC, SD/SDHC card slot, silver frame	AIG32TQ03DE

GT02

Description	Part number
Touch terminal GT02 3.8", monochrome, 240x96 pixels, RS232 + USB mini-B (prog.), 5V DC, black frame, LED backlight: red, orange, green, no SD card slot	AIG02GQ02D
Touch terminal GT02 3.8", monochrome, 240x96 pixels, RS232 + USB mini-B (prog.), 24V DC, black frame, LED backlight: red, orange, green, no SD card slot	AIG02GQ12D
Touch terminal GT02 3.8", monochrome, 240x96 pixels, RS422/485 + USB mini-B (prog.), 24V DC, black frame, LED backlight: red, orange, green, no SD card slot	AIG02GQ14D
Touch terminal GT02 3.8", monochrome, 240x96 pixels, RS232 + USB mini-B (prog.), 24V DC, SD/SDHC card slot, real-time clock, black frame, LED backlight: red, orange, green	AIG02GQ22D
Touch terminal GT02 3.8", monochrome, 240x96 pixels, RS232 + USB mini-B (prog.), 5V DC, silver frame, LED backlight: white, red, pink, no SD card slot	AIG02MQ03D
Touch terminal GT02 3.8", monochrome, 240x96 pixels, RS232 + USB mini-B (prog.), 24V DC, silver frame, LED backlight: white, red, pink, no SD card slot	AIG02MQ13D
Touch terminal GT02 3.8", monochrome, 240x96 pixels, RS232 + USB mini-B (prog.), 24V DC, SD/SDHC card slot, real-time clock, silver frame, LED backlight: white, red, pink	AIG02MQ23D

GT05

Description	Part number
Touch terminal GT05G 3.5", monochrome, 320x240 pixels, RS232 + USB B (prog), 24V DC, SD/SDHC card slot, black frame, backlight: red, orange, green	AIG05GQ02D
Touch terminal GT05M 3.5", monochrome, 320x240 pixels, RS232 + USB B (prog), 24V DC, SD/SDHC card slot, black frame, backlight: white, red, pink	AIG05MQ02D
Touch terminal GT05S 3.5", 4096 colors, 320x240 pixels, RS232 + USB B (prog), 24V DC, SD/SDHC card slot, black frame	AIG05SQ02D
Touch terminal GT05S 3.5", 4096 colors, 320x240 pixels, RS232 + USB B (prog), 24V DC, SD/SDHC card slot, silver frame	AIG05SQ03D
Touch terminal GT05M 3.5", monochrome, 320x240 pixels, RS232 + USB B (prog), 24V DC, SD/SDHC card slot, silver frame, backlight: white, red, pink	AIG05MQ03D

GT12

Description	Part number
Touch terminal GT12 4.6", 8 gray scales, 320x120 pixels, RS232 + USB mini-B (prog.), 24V DC, SD/SDHC card slot, black frame, backlight: red, orange, green	AIG12GQ12D

GT series accessories

Description	Part number
Connection cable for GT01/GT02, 5V types to the TOOL port of PLCs from the FP series, 2m	AIGT8142J
Connection cable FP0/FP-X/FP☐ (Sigma)/FP2/FP2SH TOOL port (L type) <-> FPWEB2/GT-RS232 (single wires), 2m	AIGT8192D
Mini USB programming cable, USB A to 5-pin mini USB, 1.8m	CABMINIUSB5D
Programming software for the GT series GTWIN Ver. 3	AIGSGT7EN

Panasonic
INDUSTRY

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