

Panasonic

Got questions on which Panasonic HMI will maximize your process?

Contact Ramco Innovations today!

Email us at nsales@ramcoi.com

Human Machine Interface

HMe series
HM500 series
HMs700 series
HMx700 series



APPLICATIONS



Application examples:



Machine automation



Machine builders



Packaging



Liquid dispensers



Positioning systems



Metal processing

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 webserver 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.



Service

Panasonic's service includes an expert hotline, workshops and on-site service to ensure the reliable and effective use of our touch panels. In addition to its wide-ranging product portfolio of touch panels, Panasonic also offers sensors, laser markers, programmable logic controllers, drive technology, energy management systems, ionisers, automation components and many other products and complete solutions.

HM SERIES

The developments in the current industrial revolution call for communication between human and machine in all areas. To ensure successful networking, the touch panel of the machine, which serves as a communication interface, is of vital importance. To allow people to use equipment and machines intuitively and correctly, it is vitally important that processes and data are logically visualized on the display. Thanks to the web-server architecture of our HM series, users have extensive tools for controlling and monitoring the machine or equipment and can access it via computer, tablet, or smartphone.



HM700 series – smart & innovative

- > PoE (Power over Ethernet)
- > Multiude 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




HM500 series – compact & robust

- > Innovative full-metal housing
- > Two Ethernet ports with integrated switch
- > Low power consumption
- > Expandable with different plug-in units




PoE (HM700)
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 (HM & 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 (HM700)

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 (HM700 SERIES EXCEPT HM705)

Wireless Local Area Network


- ✓ Ease of installation and use
- ✓ Offer wireless access to their employees and customers
- ✓ Connection to the wider Internet



FULL IP67 DEGREE OF PROTECTION (HM700)

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 (HM & HMx)

Logical visualization of processes and data

- ✓ Avoidance of incorrect operation due to intuitive operation of the system



USER-FRIENDLY

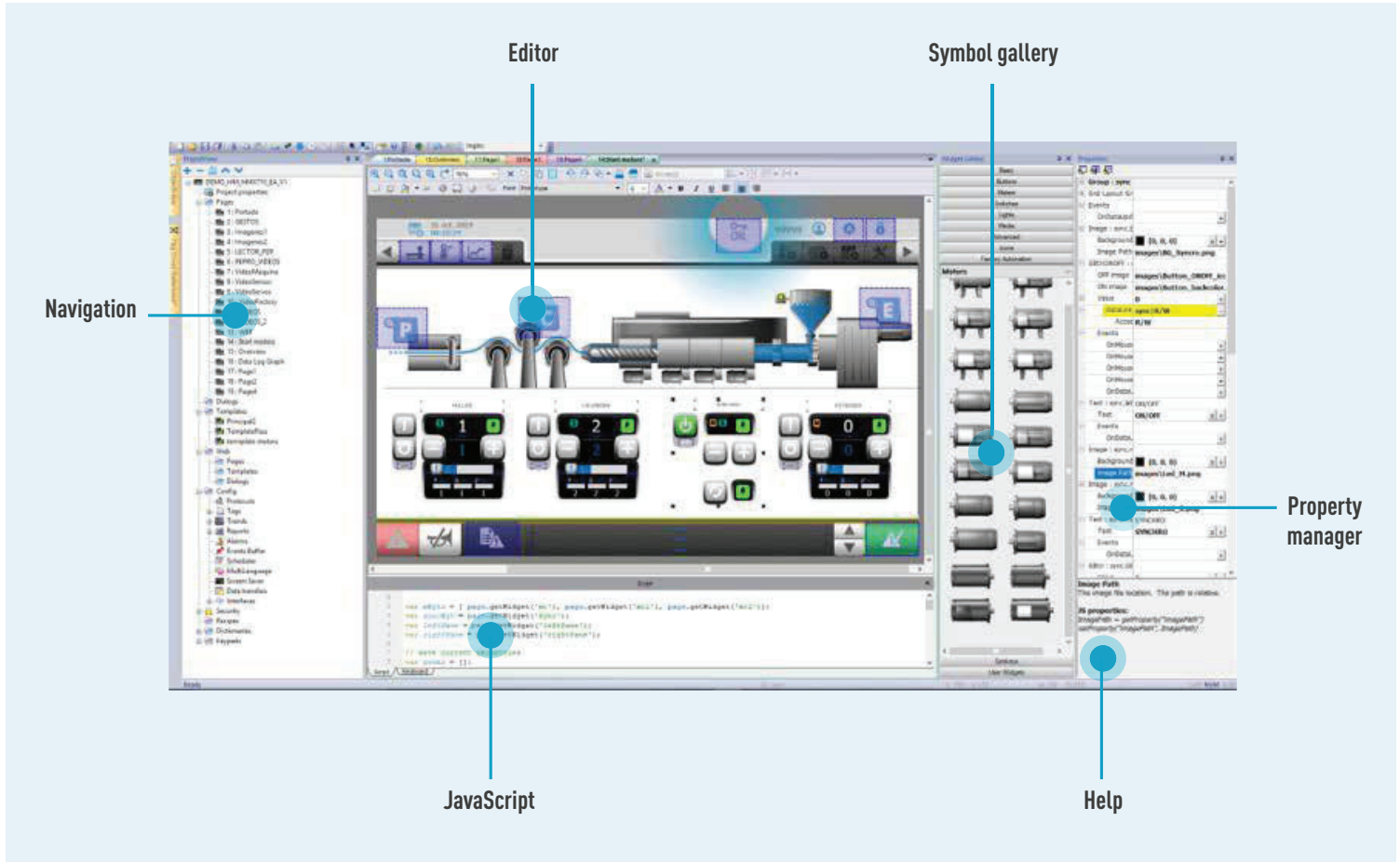
Play videos
Read PDFs
Zoom
Extremely fast writing
Operation with protective gloves

- ✓ High user ergonomics and comfort in daily work

HMWIN STUDIO

Configuration software:

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



- > 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

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	

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



Tube mounting

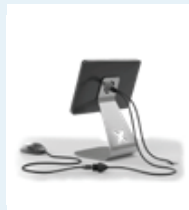


Table stand for mounting



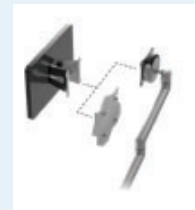
Multi-use mounting



Wall mounting



Gooseneck 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

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 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 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	

HM500 SERIES

HM500 – compact & robust

The HM500 series combines state-of-the-art features and top performance with an outstanding design in an all-metal housing. The range consists of four models in sizes from 4.3", 7", 10.4", and 13.4" TFT color display with LED backlight. All models can be installed in a horizontal or vertical position.



Features

- > Resistive touch terminal
- > Display sizes: 5", 7", 10.1", and 13.4"
- > LED backlight
- > Coating on all electronic boards
- > 2 expansion slots for plug-ins
- > 128MB flash user memory
- > Gateway to Corvina Cloud
- > Two Ethernet ports
- > Software-configurable serial port: RS232C/RS422/RS485
- > SD card slot
- > 2 USB ports with host interface (1 x host 2.0 and 1 x 2.0 or 1.1)
- > IP66 degree of protection (front)

Model	HM504	HM507	HM510	HM513
Display size	4.3" TFT 16:9	7" TFT 16:9	10"4 TFT	13"3 TFT 16:9
Resolution	480x272, WQVGA	800x480, WVGA	800x600, SVGA	1280x800, WXGA
Backlight	LED			
Brightness	150 cd/m ² typ.	300 cd/m ² typ.		
Dimming	Yes			
Colors	64K			
Touchscreen	Analog resistive			
Portrait mode	Yes			
User memory	128MB flash		256MB flash	
Serial	RS232, RS485, RS422, software configurable			
Ethernet	2 x 10/100Mbit with integrated switch			
USB	1 host interface V2.0	2 host interfaces(1 x V2.0, 1 x V2.0 and V1.1)		
Approvals	CE, cULus Class I, Div. 2			
Warranty	5 years			

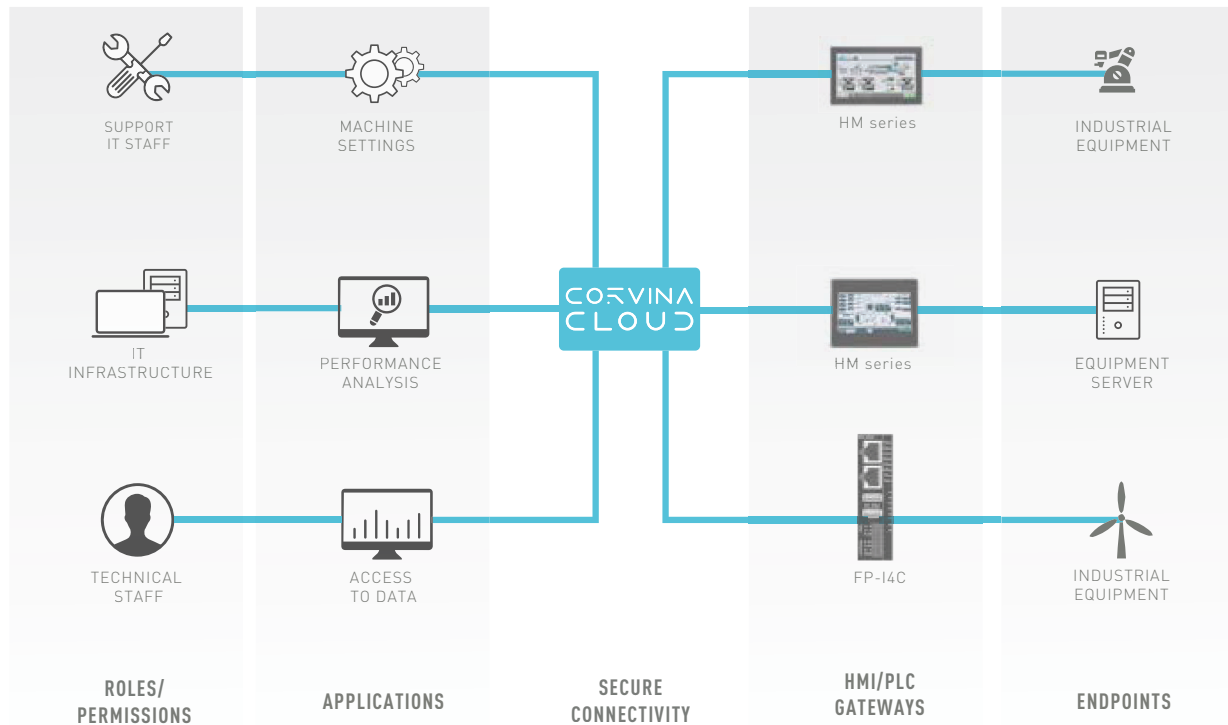
SOFTWARE

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 & 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 serve as gateways to the local network (HMe series, HM500 series, HMx700 series, HMs700 series). They connect to a central server. All Panasonic PLCs, IP cameras, and other devices capable of connecting to the Internet can act as endpoints.

Global Network



North America

Europe

Asia Pacific

China

Japan

Panasonic Electric Works

North & South America

► USA

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