



cMT3162Xv2-CODESYS | High-Performance HMI Series











- 15.6" Touchscreen HMI with CODESYS
 - Quad Core processor allows for the HMI project and PLC project to run on its own processor
 - PLC logic programmed with CODESYS
 - Add remote I/O for increased functionality
 - SQL Database, Database Server, OPC-UA Server
 - **Built-in Edge Gateway Function**

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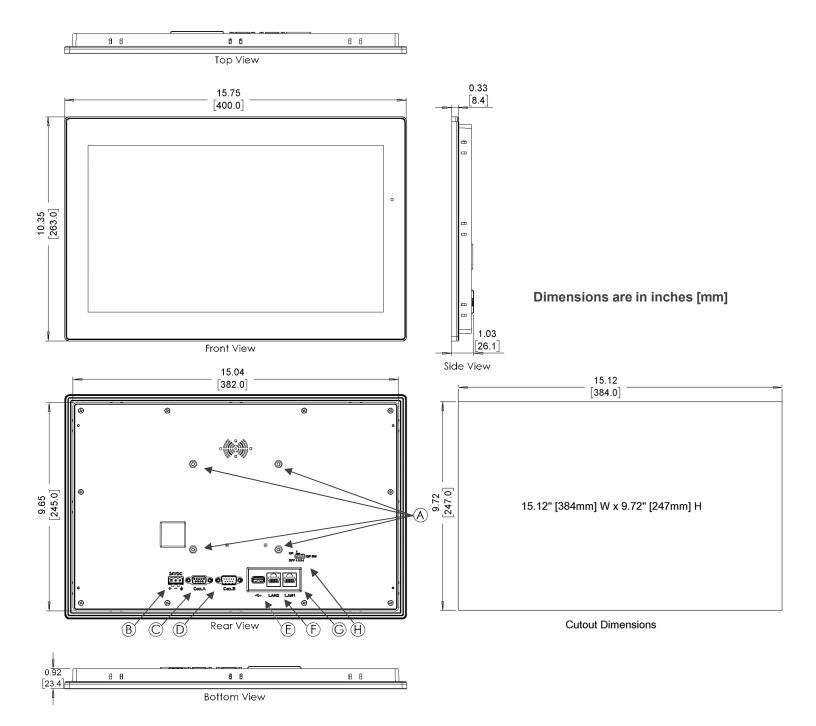


	CPU	Quad-Core RISC	
	Memory (RAM)	1 GB	
System	Memory (Flash)	4 GB	
	RTC	Built-in	
I/O Ports		1 x DE9P COM1: RS-232, COM3: RS-232*	
	Serial	1 x DE9S COM1: RS-485 2 or 4 wire, COM3: RS-485 2 wires, CANbus	
	LAN	1 x 10/100 Base-T RJ-45, 1 x GbE RJ-45**	
	CANbus	Yes	
	USB Host	1 x USB 2.0	
	USB Client	N/A	
	Audio	Built-in mono speaker	
	Video	N/A	
	Wi-Fi	N/A	
	HDMI®	N/A	
	SD Card Slot	N/A	
Display	Display Type	15.6" WVA LCD	
	Size (W x H)	13.60 x 7.68 inches [345.6 x 195 mm]	
	Max. Resolution	1920 x 1080 (1080P)	
	Max. Color	16.2 M	
	Luminance (cd/m²)	300	
	View Angle (H°/V°)	178/178	
	Contrast Ratio	800:1	
	Backlight Lifetime (Hours)	30,000+	
Touch Screen	Туре	Tempered Glass, Projected Capacitive, Vibrational Feedback	
	Hardness Scale	7H	
Electrical	Input Voltage	24 ± 20% VDC	
	Input Current	1.3 A @ 24 VDC	
	Input Power	31.2 W	
	Power Isolation	Built-in	
	Isolation Resistance	Exceed 50 MΩ at 500 VDC	
Mechanical	Enclosure	Plastic Front Bezel, Aluminum Rear, charcoal grey	
	PCB Coating	Yes	
	Dimensions (W x H x D)	15.75 x 10.35 x 1.03 inches [400 x 263 x 26.1 mm]	
	Net Weight	Approx. 3.53 lbs. [1.6 kg]	
	Mounting	Panel mounting, VESA 100 x 100 mm	
	Operating Temperature Storage Temperature	32° ~ 122°F [0° ~ 50°C] -4° ~ 140°F [-20° ~ 60°C]	
	Relative Humidity		
Environmental	Altitude (Air Pressure)	10% ~ 90% (non-condensing) Below 3,000 meters (70.1kPa)	
	Vibration Endurance	10 to 25 Hz (X, Y, Z direction, 2G, 30 minutes)	
	Rating	NEMA 4, IP66 compliant front panel	
	Certifications	cULus, CE, RoHS	
Software	EBPro (v6.07.02 or later), EasyAccess 2.0 (optional), IIoT Ready, MQTT, Sparkplug B, VNC, CMTViewer, WebView, SQL		
	*Only Tx and Rx may be used for COM1 RS-232 while COM3 RS-232 is in use. **Activation of CODESYS will monopolize LAN 1 port for exclusive CODESYS use. This action is irreversible.		
Notes	CODESYS® is a trademark of CODESYS GmbH. Specifications subject to change without notice		









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- E USB 2.0 Host Port
- F Ethernet Port
- G Gigabit Ethernet Port CODESYS Use
- H DIP Switches

VESA 100mm Screw Holes

Power Connector

COM Port DE9S

COM Port DE9P

Industrial HMIs | High-Performance

Why Buy A Maple HMI

In addition to our powerful and affordable hardware, we'll also continue to support your company long after a sale. Wide product selection, large in-stock inventory, outstanding product warranty, free technical support and software, and in-house repairs with quick turnaround times, Maple Systems has your business covered.



Add Remote IO for PLC Functionality

Select Maple Advanced and High-Performance HMIs have a sleek hardware platform that runs both an HMI application created with our free HMI software and PLC logic programmed with CODESYS; each on its own dedicated processor. Unlike the typical multicore set up, where the operating system scheduler is responsible for allocating tasks to each processor, these HMIs have a hard separation between cores. One core is dedicated to the HMI application, the other to executing PLC logic of the CODESYS project. This ensures taxing graphics processing operations will not interfere with deterministic real time control tasks executing on the other processor.

After selecting your HMI, choose from a suite of easy to use powerful I/O modules to connect to your field equipment. We offer a complete set of I/O modules which can be combined with one of our communication couplers to create a remote I/O block.

Remote Access and the IIoT

Remote access is the ability to access an HMI or connected device, from another device, at any time, and from anywhere. With our free HMI software and supported hardware solutions, you have the freedom to access the HMI, and all its data and applications, from another device and control it as if you were standing in front of it. The enhanced features in our High-Performance HMIs support SQL Database Servers, Web Browser, OPC UA Server, and FTP, in addition to cMT Viewer, WebView, Web Streaming, and EasyAccess 2.0 and are designed to make accessing your HMI and data fast and streamlined.

Our High-Performance HMIs can act as an access point enabling operating equipment on the plant floor to connect to information technologies of the Industrial Internet of Things (IIoT). With our IIoT solutions, that are already included in the EBPro software, we can help you achieve better access to invaluable data and open a world of possibilities for your business. Read more about our IIoT solutions.

Build your SCADA

We offer all the components you need to create your own unique level of supervisory data acquisition and control, from the simplest stand-alone machine to sophisticated multi-device networked production line(s), all the way to enterprise-level operations and IIoT functionalities leveraging cloud connectivity.

Our products can help you standardize communications between devices, gluing different systems together for one source to your SCADA. No need to redesign your entire application. Keep the components that are already working for you, just add Maple Systems components to grow your abilities to supervise, control, and acquire data.

Incredible Functionality Out of the Box

- Easily and quickly create the project with functional objects including numeric object, lamp object, combobutton, alarms, and recipes
- Pick and place objects, pictures, and shapes
- Import/export recipes
- · Create trend display, graphs, XY plots, and pie charts
- · Add passwords and security levels
- Assign communication (PLC) drivers easily and more with our Free HMI software

Additionally our HMIs support remote access solutions with VNC, MQTT, and OPC UA. For additional features see our High-Performance HMI series.



User Friendly HMI Configuration Software

Because designing the layout of screens and user-interface (UI) of the HMI is typically where most of the development time is spent, we've made our Free HMI configuration software easy to use.

- Import tags feature
- Tools to diagnose and monitor PLC to HMI connection
- Debugging tools
- Pre-built libraries
- · Off-line and on-line simulation

These are just a few of the ways our software makes creating your project easier. We also have controller information sheets, cable drawings, sample projects, Getting Started Guides, and videos/tutorials available in our support center 24/7.





Matsushita

Programmable Logic Controller (PLC) Connectivity

With over 300 PLC & Controller communication protocols, these HMIs will easily integrate with your preferred PLC brands, including:

Allen-Bradley
Siemens
Omron
Emerson
GE
Panasonic
Mitsubishi
...and many more

Panel Mount HMI Feature Overview					
With few exceptions, all our Standard HMIs support (this covers all the HMI prefix models, ex: HMI5043L/LB, HMI5070L/LB):	With few exceptions, all our Advanced HMIs support (this covers all the cMT2xxx series):	With few exceptions, all our High Performance HMIs support (this covers all the cMT3xxx series HMIs):			
Alarm & Event Messages	Alarm & Event Messages	Alarm & Event Messages			
Animation - Flow Block	Animation - Flow Block	Animation - Flow Block			
ASCII Characters	ASCII Characters	ASCII Characters			
Bar Graphs	Bar Graphs	Bar Graphs			
Combo Button	Combo Button	Combo Button			
Data Logging and Sampling	Data Logging and Sampling	Data Logging and Sampling			
Date / Time	Date / Time	Date / Time			
Dynamic Drawing	Dynamic Drawing	Dynamic Drawing			
Dynamic Scale	Dynamic Scale	Dynamic Scale			
EasyAccess 2.0	EasyAccess 2.0	EasyAccess 2.0			
EasyWatch	EasyWatch	EasyWatch			
Enhanced Security Mode	Enhanced Security Mode	Enhanced Security Mode			
Event Alarm Log	Event Alarm Log	Event Alarm Log			
File Browser	File Browser	File Browser			
Grid Display	Grid Display	Grid Display			
Languages (Up to 24)	Languages (Up to 24)	Languages (Up to 24)			
Libraries	Libraries	Libraries			
Macros	Macros	Macros			
Meters & Gauges	Meters & Gauges	Meters & Gauges			
C .	Ŭ	Meters & Gauges Modbus			
Modbus Objects (Converse Levering Aligning Flin)	Modbus Objects (Crowning Levening Aligning Elip)	1 111			
Objects (Grouping, Layering, Aligning, Flip)	Objects (Grouping, Layering, Aligning, Flip)	Objects (Grouping, Layering, Aligning, Flip)			
Off-line / On-line Simulation	Off-line / On-line Simulation	Off-line / On-line Simulation			
OPC UA Client	OPC UA Client	OPC UA Client			
Operation Log	Operation Log	Operation Log			
Pass-Through Mode	Pass-Through Mode	Pass-Through Mode			
Picture Object	Picture Object	Picture Object			
Picture Viewer	Picture Viewer	Picture Viewer			
Pie Chart	Pie Chart	Pie Chart			
PLC Tag Embedded in Project	PLC Tag Embedded in Project	PLC Tag Embedded in Project			
Project Password	Project Password	Project Password			
Recipes	Recipes	Recipes			
Remote Access	Remote Access	Remote Access			
Scheduler	Scheduler	Scheduler			
Security Levels (Enhanced)	Security Levels (Enhanced)	Security Levels (Enhanced)			
System Setting Editor	System Setting Editor	System Setting Editor			
Table	Table	Table			
Text Object					
	Text Object	Text Object			
Timer Object	Timer Object	Timer Object			
Trend Display (Graphs)	Trend Display (Graphs)	Trend Display (Graphs)			
User-Defined Start-Up Screen	User-Defined Start-Up Screen	User-Defined Start-Up Screen			
Utility Manager	Utility Manager	Utility Manager			
VNC Server	VNC Server	VNC Server			
XY Plot	XY Plot	XY Plot			
Email (I)	Email	Email			
Macro Windows Open / Cycle / Close (I)	Macro Windows Open / Cycle / Close	Macro Windows Open / Cycle / Close			
MQTT (I)	MQTT	MQTT			
String Table (1)	String Table	String Table			
Time Synchronization (1)	Time Synchronization	Time Synchronization			
USB Tethering	USB Tethering	USB Tethering			
VNC Viewer (I)	VNC Viewer	VNC Viewer			
	IP Camera	IP Camera			
	USB Camera	USB Camera			
	Animation (Objects, Word Lamp, GIFs, Moving Shape)	Animation (Objects, Word Lamp, GIFs, Moving Shape)			
	BACnet	BACnet			
	CANbus	CANbus			
	cMT Diagnoser	cMT Diagnoser			
	cMT Viewer Support	cMT Viewer Support			
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	CODESYS (2)	CODESYS Madia Player			
	Media Player	Media Player			
	MQTT - Advanced JSON	MQTT - Advanced JSON			
	MQTT - AWS IoT, Sparkplug B, Azure IoT Hub	MQTT - AWS IoT, Sparkplug B, Azure IoT Hub			
	PDF Reader	PDF Reader			
	Web Streaming	Web Streaming			
	WebView	WebView			
		Barcode Scanner (Android Camera)			
		Database Server			
		File Transfer Protocol (FTP)			
		OPC UA Server			
		PLC Web Browser			
		SQL Database Server Integration			
		SE Database Server Integration			

This table is for illustration only and subject to change. Always check the software to see if a feature is supported in your specific hardware.

⁽I) Not supported in the B Series (HMI5040B, 5070B, 5100B)

⁽²⁾ Not supported on the cMT2166X