

cMT3102Xv2R | High-Performance HMI Series



10.1" Touchscreen HMI with IIoT Features



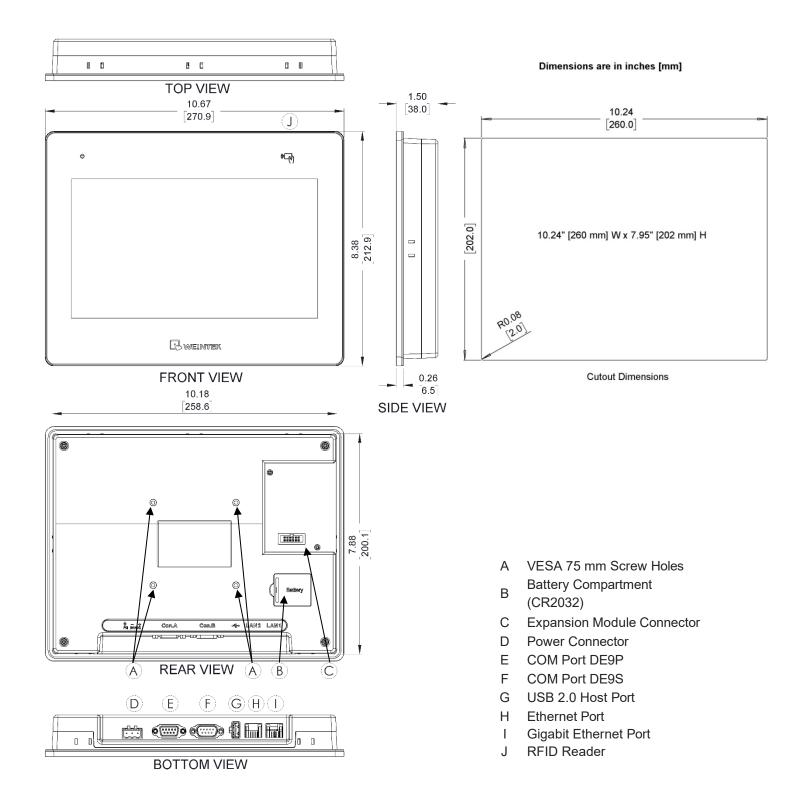




- Built-in RFID
- Quad Core processor allows for the HMI project and PLC project to run on its own processor
- **Built-in Edge Gateway Function**
- Recipe Functionality, PDF Reader
- SQL Database, Database Server, OPC-UA Server

®MQTT ® SQL Secret UA Easy <u>Access≥0</u> ***podbus Sparkplug [™] V 2 SEC. ****Podbus Azure **** Azure ************************************				
System	CPU	Quad-Core RISC		
	Memory (RAM)	1 GB		
	Memory (Flash)	4 GB		
	RTC	Built-in		
I/O Ports	Coriol	1 x DE9P COM1: RS-232 4 wire, COM3: RS-232** 2 wire,		
	Serial	1 x DE9S COM2: RS-485 2 or 4 wire, COM3: RS-485 2 wires, CANbus		
	LAN	LAN 1: 10/100/1000 Base-T RJ-45, LAN 2: 10/100 Base-T RJ-45		
	CANbus	Yes		
	USB Host	1 x USB 2.0		
	USB Client	N/A		
	Audio	N/A		
	Video	N/A		
	Wi-Fi*	M02 Wi-Fi Expansion Module (optional – see notes)		
	HDMI [®]	N/A		
	SD Card Slot	N/A		
DEID	Compatibility Standard	ISO/IEC 14443 Type A/B, Frequency: 13.56 MHz		
RFID	Reading Distance	Max. 4 cm		
Display	Display Type	10.1" TFT LCD		
	Size (W x H)	8.82 x 4.96 inches [224 x 126 mm]		
	Max. Resolution	1024 x 600		
	Max. Color	16.7 M		
Display	Luminance (cd/m²)	350		
	View Angle (H°/V°)	178/178		
	Contrast Ratio	1000:1		
	Backlight Lifetime (Hours)	50,000+		
Touch Screen	Туре	4-wire resistive touch		
	Active Area Accuracy	Length (X) ±2%, width (Y) ±2%		
Electrical	Input Voltage	24 ± 20% VDC		
	Input Current	1 A @ 24 VDC		
	Input Power	24 W		
	Power Isolation	Built-in		
	Isolation Resistance	Exceed 50 MΩ at 500 VDC		
Mechanical	Enclosure	Plastic, charcoal grey		
	PCB Coating	Yes		
	Dimensions (W x H x D)	10.67 x 8.39 x 1.50 inches [271 x 213 x 38 mm]		
	Panel Cutout (W x H)	10.24 x 7.95 inches [260 x 202 mm]		
	Net Weight	Approx. 2.65 lbs. [1.2 kg]		
	Mounting	Panel mounting, VESA 75 x 75 mm		
Environmental	Operating Temperature	32° ~ 122°F [0° ~ 50°C]		
	Storage Temperature	-4° ~ 140°F [-20° ~ 60°C]		
	Relative Humidity	10% ~ 90% (non-condensing)		
	Altitude (Air Pressure)	Below 3,000 meters (70.1kPa)		
	Vibration Endurance	10 to 25 Hz (X, Y, Z direction, 2G, 30 minutes)		
	Rating	UL Type 4X (indoor use only), NEMA 4, IP66 compliant front panel		
	Certifications	cULus, CE, RoHS		
Software	EBPro (v6.09.02 or later), EasyAccess 2.0 (Optional), CODESYS® (Optional), SQL, MQTT, OPCUA Client, OPCUA S			
- Contware	VNC, cMT Viewer, EasyWeb 2	·		
Notes	* M02 Wi-Fi Expansion Module (sold separately – see website Product Page or contact Maple Systems for information) ** Only Tx and Rx may be used for COM1 RS-232 while COM3 RS-232 is in use.			
	CODESYS® is a trademark of CODESYS GmbH. Specifications subject to change without notice			
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cMT3102Xv2R | High-Performance HMI Series





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 <u>IIoT solutions</u>.

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 Animation - Flow Block	Alarm & Event Messages Animation - Flow Block	Alarm & Event Messages		
ASCII Characters	ASCII Characters	Animation - Flow Block 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) Libraries	Languages (Up to 24) Libraries	Languages (Up to 24)		
Macros	Macros	Macros		
Meters & Gauges	Meters & Gauges	Meters & Gauges		
Modbus	Modbus Modbus	Modbus		
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 Security Levels (Ephanead)	Scheduler Security Levels (Ephanead)	Scheduler Security Levels (Enhanced)		
Security Levels (Enhanced) System Setting Editor	Security Levels (Enhanced) System Setting Editor	Security Levels (Enhanced) 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 Serving Table	MQTT		
String Table (I)	String Table	String Table Time Synchronization		
Time Synchronization (I) USB Tethering	Time Synchronization USB Tethering	Time Synchronization USB Tethering		
VNC Viewer (I)	VNC Viewer	VNC Viewer		
THE HEREI (1)	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		
	CODESYS (2)	CODESYS		
	Media Player	Media Player		
	·	MOTT ALL LICON		
	MQTT - Advanced JSON	MQTT - Advanced JSON		
	MQTT - AWS IoT, Sparkplug B, Azure IoT Hub	MQTT - AWS IoT, Sparkplug B, Azure IoT Hub		
	MQTT - AWS IoT, Sparkplug B, Azure IoT Hub PDF Reader	MQTT - AWS IoT, Sparkplug B, Azure IoT Hub PDF Reader		
	MQTT - AWS IoT, Sparkplug B, Azure IoT Hub PDF Reader Web Streaming	MQTT - AWS IoT, Sparkplug B, Azure IoT Hub PDF Reader Web Streaming		
	MQTT - AWS IoT, Sparkplug B, Azure IoT Hub PDF Reader	MQTT - AWS IoT, Sparkplug B, Azure IoT Hub PDF Reader Web Streaming WebView		
	MQTT - AWS IoT, Sparkplug B, Azure IoT Hub PDF Reader Web Streaming	MQTT - AWS IoT, Sparkplug B, Azure IoT Hub PDF Reader Web Streaming WebView Barcode Scanner (Android Camera)		
	MQTT - AWS IoT, Sparkplug B, Azure IoT Hub PDF Reader Web Streaming	MQTT - AWS IoT, Sparkplug B, Azure IoT Hub PDF Reader Web Streaming WebView Barcode Scanner (Android Camera) Database Server		
	MQTT - AWS IoT, Sparkplug B, Azure IoT Hub PDF Reader Web Streaming	MQTT - AWS IoT, Sparkplug B, Azure IoT Hub PDF Reader Web Streaming WebView Barcode Scanner (Android Camera) Database Server File Transfer Protocol (FTP)		
	MQTT - AWS IoT, Sparkplug B, Azure IoT Hub PDF Reader Web Streaming	MQTT - AWS IoT, Sparkplug B, Azure IoT Hub PDF Reader Web Streaming WebView Barcode Scanner (Android Camera) Database Server		

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 (HMI 5040B, 5070B, 5100B)

⁽²⁾ Not supported on the cMT2166X