



### cMT2078Xv2 | Advanced HMI Series











### 7.0" Touchscreen HMI with IIoT Features

- High Speed Screen Update
- **Dual Ethernet Ports**
- **Built-in Edge Gateway Function**
- **Enhanced Graphics & Security**
- **Email Alarm Notification and Recipe Functionality**
- PDF Reader

Easy <u>Access</u> 20	Modbus	Sparkplug™









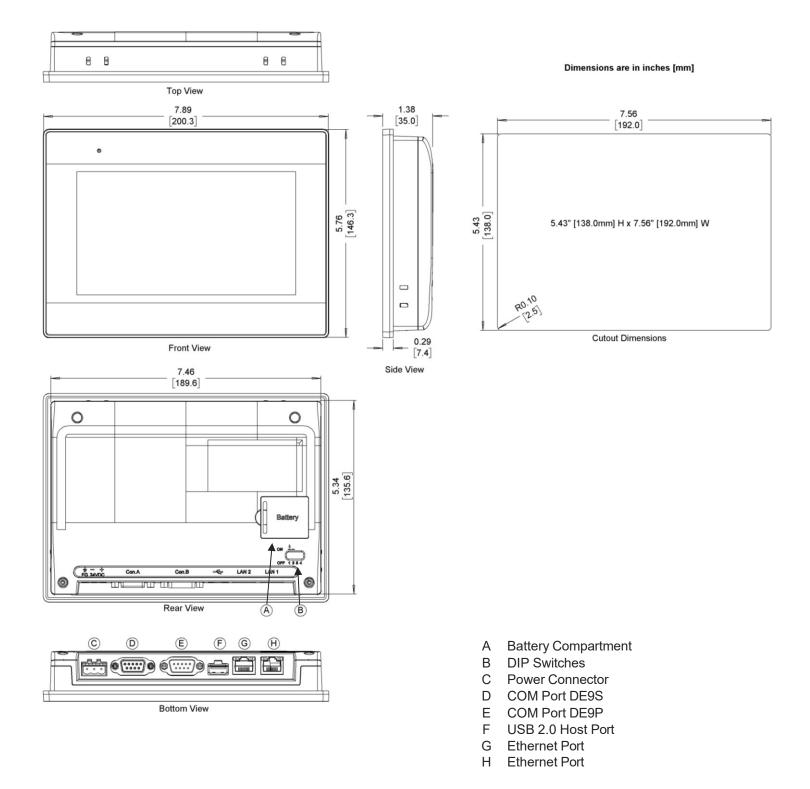


	CPU	Quad-Core RISC, 1.5 GHz	
	Memory (RAM)	1 GB	
System	Memory (Flash)	4 GB	
	RTC	Built-in	
		1 x DE9P COM1: RS-232, COM3: RS-232*	
I/O Ports	Serial	1 x DE9S COM2: RS-485 2 or 4 wire, COM3: RS-485 2 wires	
	LAN	2 x 10/100 Base-T RJ-45	
	CANbus	N/A	
	USB Host	1 x USB 2.0	
	USB Client	N/A	
	Audio	N/A	
	Video	N/A	
	Wi-Fi	N/A	
	HDMI®	N/A	
	SD Card Slot	N/A	
	Display Type	7" TFT LCD	
	Size (W x H)	6.02 x 3.39 inches [153 x 86 mm]	
Display	Max. Resolution	800 x 480	
	Max. Colors	16.7 M	
Diopiay	Luminance (cd/m²)	400	
	View Angle (H°/V°)	160/140	
	Contrast Ratio	800:1	
	Backlight Lifetime (Hours)	30,000+	
Touch Screen	Туре	4-wire resistive touch	
Touch Screen	Active Area Accuracy	Length (X) ±2%, width (Y) ±2%	
Electrical	Input Voltage	24 ± 20% VDC	
	Input Current	820mA @ 24 VDC	
Lieoti iodi	Input Power	19.7 W	
	Power Isolation	Built-in	
	Isolation Resistance	Exceed 50 MΩ at 500 VDC	
Mechanical	Enclosure	Plastic Front, Aluminum Rear, charcoal grey	
	PCB Coating	Yes	
	Dimensions (W x H x D)	7.89 x 5.76 x 1.38 inches [200.3 x 146.3 x 35 mm]	
	Panel Cutout (W x H)	7.56 x 5.43 inches [192.0 x 138.0 mm]	
	Net Weight	Approx. 1.32 lbs. [0.6 kg]	
	Mounting	Panel mounting	
	Operating Temperature	32° ~ 131°F [0° ~ 55°C]	
Environmental	Storage Temperature	-4° ~ 140°F [-20° ~ 60°C]	
Environmentai	Relative Humidity  Altitude (Air Pressure)	10% ~ 90% (non-condensing)	
	Vibration Endurance	Below 3,000 meters (70.1 kPa)	
	Rating	10 to 25 Hz (X, Y, Z direction, 2G, 30 minutes)  UL Type 4X (indoor use only), NEMA 4, IP66 compliant front panel	
	Certifications	cULus, CE, RoHS	
	ERPro (v6.00.02 or later). EasyAccess 2.0 (ontional). CODESVS (ontional). IIoT Ready. MOTT. Spark		
Software	CMTViewer, WebView		
	*Only Tx and Rx may be used for	or COM1 RS-232 while COM3 RS-232 is in use.	
Notes	Notes  CODESYS® is a trademark of CODESYS GmbH. Specifications subject to change without notice		





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### 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.

a remote I/O block.

# 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

### 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. Our Advanced and High-Performance HMIs support <u>cMT Viewer</u>, <u>WebView</u>, Web Streaming, and EasyAccess 2.0 and are designed to make accessing your HMI and data fast and streamlined.

Let us serve as your guide, making it an easy process to join the next evolution of automated control. Our
Advanced and 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>lloT 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



Maple Systems, Inc. | 808 134th St SW, suite 120, Everett, WA 98204 | 425.745.3229 | maplesystems.com

#### Incredible Functionality Out of the Box

- Easily and quickly create the project with functional objects including numeric object, lamp object, combo- button, 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 userinterface (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 senter 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

With few exceptions, all our Standard HMIs With few exceptions, all our High				
support (this covers all the HMI prefix	With few exceptions, all our Advanced HMIs	With few exceptions, all our High Performance HMIs support (this covers all the		
models, ex: HMI5043L/LB, HMI5070L/LB):	support (this covers all the cMT2xxx series):	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		
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		
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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	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 (1)	Email	Email		
Macro Windows Open / Cycle / Close (1)	Macro Windows Open / Cycle / Close	Macro Windows Open / Cycle / Close		
MQTT (1)	MQTT	MQTT		
String Table (1)	String Table Time Synchronization	String Table		
Time Synchronization (1)	Time Synchronization	Time Synchronization		
USB Tethering	USB Tethering	USB Tethering		
VNC Viewer (1)	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 Shap		
	BACnet	BACnet		
	CANbus	CANbus		
	cMT Diagnoser	cMT Diagnoser		
	cMT Viewer Support	cMT Viewer Support		
	CODESYS (2)	CODESYS		
	Media Player	Media Player		
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	MQTT - Advanced JSON  MQTT - AWS IoT, Sparkplug B, Azure IoT Hub  PDF Reader	MQTT - Advanced JSON  MQTT - AWS IoT, Sparkplug B, Azure IoT Hub  PDF Reader		
	Web Streaming	Web Streaming		
	WebView	WebView		
		Barcode Scanner (Android Camera)		
		Database Server		
		File Transfer Protocol (FTP)		
		OPC UA Server		
		PLC Web Browser		

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.

<sup>(1)</sup> Not supported in the B Series (HMI5040B, 5070B, 5100B)

<sup>(2)</sup> Not supported on the cMT2166X