

#### cMT2078Xv2 | Advanced HMI Series

#### 7.0" Touchscreen HMI with IIoT Features











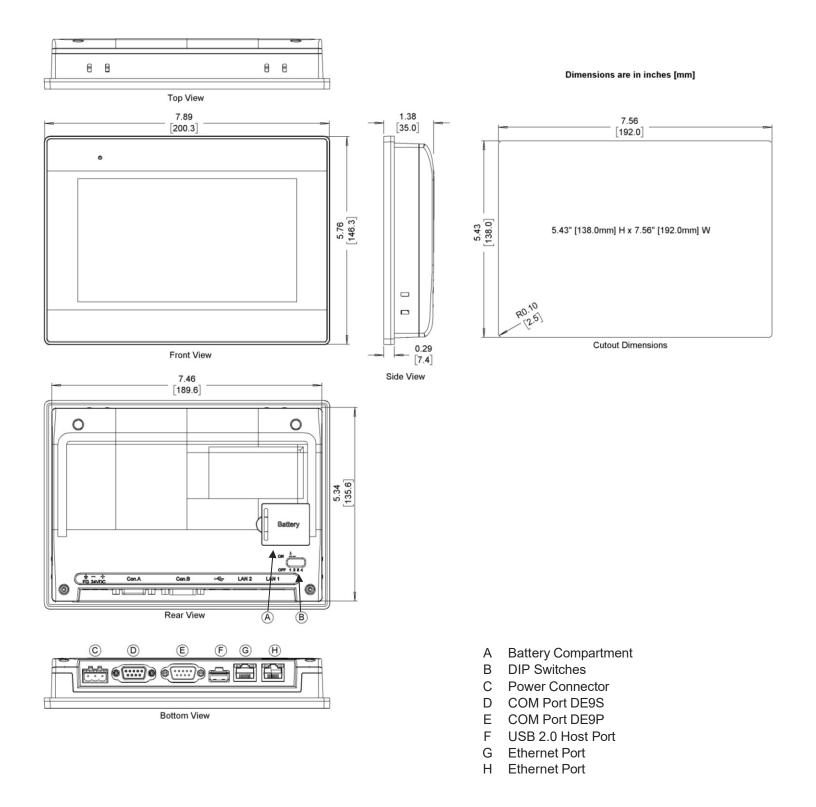
- High Speed Screen Update
- **Dual Ethernet Ports**
- **Built-in Edge Gateway Function**
- Enhanced Graphics & Security
- Email Alarm Notification and Recipe Functionality
- PDF Reader

MQT EasyAccess20	<b>‱odbus</b> Sparkplug™	۸۵	Viewer	amazon web services	<b>⚠</b> Az	ure	CODESYS
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	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*			
	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			
I/O Ports	USB Host	1 x USB 2.0			
	USB Client	N/A			
	Audio	N/A			
	Video	N/A			
	Wi-Fi	N/A			
	HDMI <sup>®</sup>	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]			
	Max. Resolution	800 x 480			
Display	Max. Colors	16.7 M			
	Luminance (cd/m²)	400			
	View Angle (H°/V°)	160/140			
	Contrast Ratio	800:1			
	Backlight Lifetime (Hours)	30,000+			
	Туре	4-wire resistive touch			
Touch Screen	Active Area Accuracy	Length (X) ±2%, width (Y) ±2%			
	Input Voltage	24 ± 20% VDC			
	Input Current	820mA @ 24 VDC			
Electrical	Input Power	19.7 W			
	Power Isolation	Built-in			
	Isolation Resistance	Exceed 50 MΩ at 500 VDC			
	Enclosure	Plastic, charcoal grey			
	PCB Coating	Yes			
Mechanical	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]			
	Storage Temperature	-4° ~ 140°F [-20° ~ 60°C]			
Environmental	Relative Humidity	10% ~ 90% (non-condensing)			
	Altitude (Air Pressure)	Below 3,000 meters (70.1 kPa)			
	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), IIoT Ready, MQTT, Sparkplug B, VNC, CMTViewer, WebView				
		or COM1 RS-232 while COM3 RS-232 is in use			
Notes	*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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#### 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. Our Advanced and High-Performance HMIs support cMT Viewer, WebView, 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>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

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 support (this covers all the cMT2xxx series):	Performance HMIs support (this covers all the cMT3xxx series HMIs):					
models, ex: HMI5043L/LB, HMI5070L/LB):	Alaura & Event Massages	<u>,                                      </u>					
Alarm & Event Messages Animation - Flow Block	Alarm & Event Messages Animation - Flow Block	Alarm & Event Messages 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					
asyAccess 2.0	EasyAccess 2.0	EasyAccess 2.0					
asyWatch	EasyWatch	EasyWatch					
nhanced 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					
anguages (Up to 24)	Languages (Up to 24)	Languages (Up to 24)					
ibraries	Libraries	Libraries					
1acros	Macros	Macros					
1eters & Gauges	Meters & Gauges	Meters & Gauges					
1odbus	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	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)					
Jser-Defined Start-Up Screen	User-Defined Start-Up Screen	User-Defined Start-Up Screen					
Jtility 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 (I)	MQTT	MOTT					
String Table (I)	String Table	String Table					
Fime Synchronization (1)	Time Synchronization	Time Synchronization					
JSB Tethering	USB Tethering	USB Tethering					
/NC Viewer (1)	VNC Viewer	VNC Viewer					
TING VIEWEI (I)	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					
	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					
		I LE TYEU DI UWSEI					

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