



cMT2158X | Advanced HMI Series

15" 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

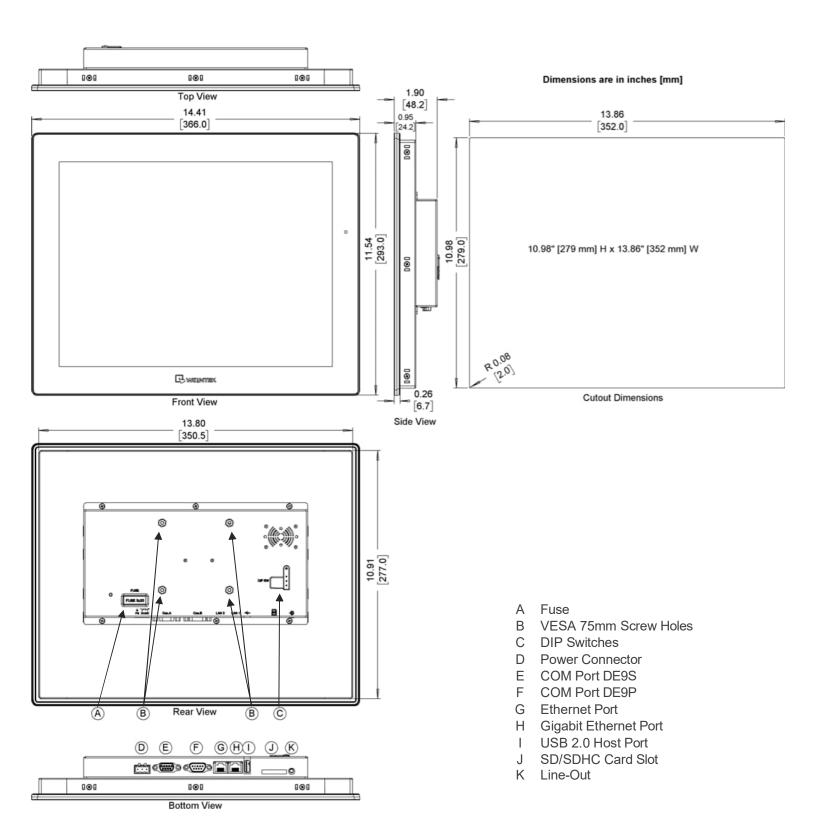
MOTE EasyAccess20 Modbus Snarknlun [™]	۷2	CITIT

Memory (Rahn) 4 GB	Custom	CPU	32-bit RISC Quad-Core 1.6 GHz	
Memory (Flash)	System		1 GB	
I/O Ports		Memory (Flash)	4 GB	
Serial		RTC	Built-in	
LAN	I/O Ports	Ocatel	1 x DE9P COM1: RS-232, COM3: RS-232*	
CANbus N/A USB Hots 1 x USB 2.0 USB Client N/A Audio 1 x audio line out = 3.5 mm and built-in mono speaker Video N/A WI-F N/A HDMIP		Seriai	1 x DE9S COM1: RS-485 2 or 4 wire, COM3: RS-485 2 wires	
USB Host		LAN	1 x 10/100 Base-T RJ-45, 1 x GbE RJ-45	
USB Client		CANbus	N/A	
Audio		USB Host	1 x USB 2.0	
Video N/A Wi-Fi N/A HDMf [®] N/A HDMf [®] N/A SD Card Slot 1 x Secure Digital (SD/SDHC) Memory Card Socket, up to 32 GB Display Type 15° IPS LCD Size (W x H) 12.00 x 9.00 inches [304.7 x 228.5 mm] Max. Resolution 1024 x 768 Max. Colors 16.2 M Luminance (cd/m²) 400 View Angle (H²N²) 178/178 Contrast Ratio 1000:1 Backlight Lifetime (Hours) 50,000+ Type 4-wire resistive touch Active Area Accuracy Length (X) ±2%, width (Y) ±2% Input Ourrent 1.3 A @ 24 VDC Input Power 31.2 W Power Isolation Buill-in Isolation Resistance Exceed 50 MΩ at 500 VDC Enclosure Aluminum PCB Coating Yes Dimensions (W x H x D) 14.41 x 11.54 x 1.90 inches [366 x 293 x 48.2 mm] Cutout Dimensions (W x H) 13.86 x 10.98 inches [352 x 279 mm] Net Weight Approx. 5.73 lbs. [2.6 kg] Mounting Panel mounting, VESA 75 x 75 mm Operating Temperature 32° ~ 122° F (0° ~ 50°C) Storage Temperature 4° ~ 140° F (-20° ~ 60°C) Relative Humidity 10% ~ 90% (non-condensing) Vibration Endurance 10 to 25 Hz (X, Y, Z direction, 2G, 30 minutes) Certifications CULus, CE, RoHS Control Sund Sund Sund Sund Sund Sund Sund Sund		USB Client	N/A	
Wi-Fi		Audio	1 x audio line out – 3.5 mm and built-in mono speaker	
HDMI® N/A SD Card Slot 1 x Secure Digital (SD/SDHC) Memory Card Socket, up to 32 GB		Video	N/A	
Display Type		Wi-Fi	N/A	
Display Type 15" IPS LCD		HDMI [®]	N/A	
Size (W x H)		SD Card Slot	1 x Secure Digital (SD/SDHC) Memory Card Socket, up to 32 GB	
Max. Resolution		Display Type	15" IPS LCD	
Max. Colors		Size (W x H)	12.00 x 9.00 inches [304.7 x 228.5 mm]	
Luminance (cd/m²)		Max. Resolution	1024 x 768	
Luminance (cdm²) 400 View Angle (H°)V°) 178/178 Contrast Ratio 1000:1 Backlight Lifetime (Hours) 50,000+ Type	Dieplay	Max. Colors	16.2 M	
Contrast Ratio 1000:1	Display	Luminance (cd/m²)	400	
Backlight Lifetime (Hours) 50,000+		View Angle (H°/V°)	178/178	
Type		Contrast Ratio	1000:1	
Active Area Accuracy		Backlight Lifetime (Hours)	50,000+	
Input Voltage	Type		4-wire resistive touch	
Input Current	Touch Screen	Active Area Accuracy	Length (X) ±2%, width (Y) ±2%	
Input Power 31.2 W		Input Voltage	24 ± 20% VDC	
Power Isolation Built-in	Electrical	Input Current	1.3 A @ 24 VDC	
Isolation Resistance	Electrical	Input Power	31.2 W	
Enclosure Aluminum		Power Isolation	Built-in	
PCB Coating Yes Dimensions (W x H x D) 14.41 x 11.54 x 1.90 inches [366 x 293 x 48.2 mm] Cutout Dimensions (W x H) 13.86 x 10.98 inches [352 x 279 mm] Net Weight Approx. 5.73 lbs. [2.6 kg] Mounting Panel mounting, VESA 75 x 75 mm Operating Temperature 32° ~ 122°F [0° ~ 50°C] Storage Temperature -4° ~ 140°F [-20° ~ 60°C] Relative Humidity 10% ~ 90% (non-condensing) 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 EBPro (v6.05.02 or later), EasyAccess 2.0 (optional), CODESYS (optional), IIoT Ready, MQTT, Sparkplug B, VNC CMTViewer, Webview *Only Tx and Rx may be used for COM1 RS-232 while COM3 RS-232 is in use. MPI is not supported.		Isolation Resistance	Exceed 50 MΩ at 500 VDC	
Dimensions (W x H x D) 14.41 x 11.54 x 1.90 inches [366 x 293 x 48.2 mm]		Enclosure	Aluminum	
Cutout Dimensions (W x H) Net Weight Approx. 5.73 lbs. [2.6 kg] Mounting Panel mounting, VESA 75 x 75 mm Operating Temperature 32° ~ 122°F [0° ~ 50°C] Storage Temperature -4° ~ 140°F [-20° ~ 60°C] Relative Humidity 10% ~ 90% (non-condensing) 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 EBPro (v6.05.02 or later), EasyAccess 2.0 (optional), CODESYS (optional), IIoT Ready, MQTT, Sparkplug B, VNC CMTViewer, Webview *Only Tx and Rx may be used for COM1 RS-232 while COM3 RS-232 is in use. MPI is not supported.				
Net Weight Approx. 5.73 lbs. [2.6 kg]	Mechanical			
Mounting Panel mounting, VESA 75 x 75 mm		Cutout Dimensions (W x H)	13.86 x 10.98 inches [352 x 279 mm]	
Comparing Temperature 32° ~ 122°F [0° ~ 50°C]		Net Weight	Approx. 5.73 lbs. [2.6 kg]	
Storage Temperature				
Relative Humidity 10% ~ 90% (non-condensing)		Operating Temperature		
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 EBPro (v6.05.02 or later), EasyAccess 2.0 (optional), CODESYS (optional), IIoT Ready, MQTT, Sparkplug B, VN0 CMTViewer, Webview *Only Tx and Rx may be used for COM1 RS-232 while COM3 RS-232 is in use. MPI is not supported.	Environmental	Storage Temperature	-4° ~ 140°F [-20° ~ 60°C]	
Rating UL Type 4X (indoor use only), NEMA 4, IP66 compliant front panel Certifications cULus, CE, RoHS Bellower, (v6.05.02 or later), EasyAccess 2.0 (optional), CODESYS (optional), IIoT Ready, MQTT, Sparkplug B, VNC CMTViewer, Webview *Only Tx and Rx may be used for COM1 RS-232 while COM3 RS-232 is in use. MPI is not supported.			07	
Certifications cULus, CE, RoHS EBPro (v6.05.02 or later), EasyAccess 2.0 (optional), CODESYS (optional), IIoT Ready, MQTT, Sparkplug B, VNC CMTViewer, Webview *Only Tx and Rx may be used for COM1 RS-232 while COM3 RS-232 is in use. MPI is not supported.				
Software EBPro (v6.05.02 or later), EasyAccess 2.0 (optional), CODESYS (optional), IIoT Ready, MQTT, Sparkplug B, VN0 CMTViewer, Webview *Only Tx and Rx may be used for COM1 RS-232 while COM3 RS-232 is in use. MPI is not supported.			77.	
CMTViewer, Webview *Only Tx and Rx may be used for COM1 RS-232 while COM3 RS-232 is in use. MPI is not supported.				
	Software	CMTViewer, Webview		
Notes		*Only Tx and Rx may be used fo	or COM1 RS-232 while COM3 RS-232 is in use. MPI is not supported.	





cMT2158X | Advanced 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. 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 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 2.1	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		
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 (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	String Table		
Time Synchronization (1)	Time Synchronization	Time Synchronization		
USB Tethering (1)	USB Tethering	USB Tethering		
VNC Viewer (1)	VNC Viewer	VNC Viewer		
THE VIEWER (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 Objects, word Lamp, GIFS, Moving Snape		
	CANbus OMT Diagnoser	CANbus oMT Diagnoser		
	cMT Diagnoser	cMT Diagnoser		
	cMT Viewer Support	cMT Viewer Support		
	CODESYS (2)	CODESYS (2)		
	Media Player	Media Player		
	MQTT - Advanced JSON	MQTT - Advanced JSON		
	MQTT - AWS IoT, Sparkplug B, Azure IoT Hub, Google	MQTT - AWS IoT, Sparkplug B, Azure IoT Hub, Google		
	Cloud IoT Core	Cloud loT Core		
	Cloud IoT Core PDF Reader	PDF Reader		
	Cloud IoT Core PDF Reader Web Streaming	PDF Reader Web Streaming		
	Cloud IoT Core PDF Reader	PDF Reader Web Streaming WebView		
	Cloud IoT Core PDF Reader Web Streaming	PDF Reader Web Streaming WebView Barcode Scanner (Android Camera)		
	Cloud IoT Core PDF Reader Web Streaming	PDF Reader Web Streaming WebView		
	Cloud IoT Core PDF Reader Web Streaming	PDF Reader Web Streaming WebView Barcode Scanner (Android Camera)		
	Cloud IoT Core PDF Reader Web Streaming	PDF Reader Web Streaming WebView Barcode Scanner (Android Camera) Database Server		
	Cloud IoT Core PDF Reader Web Streaming	PDF Reader Web Streaming WebView Barcode Scanner (Android Camera) Database Server File Transfer Protocol (FTP)		

⁽¹⁾ Not supported in the B Series

⁽²⁾ Not supported on the cMT2166X