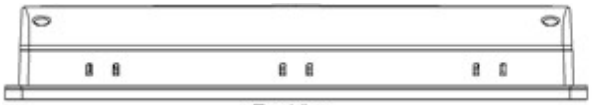
# cMT2108X2v2 | Advanced HMI Series



## 10.1” Touchscreen HMI with IIoT Features

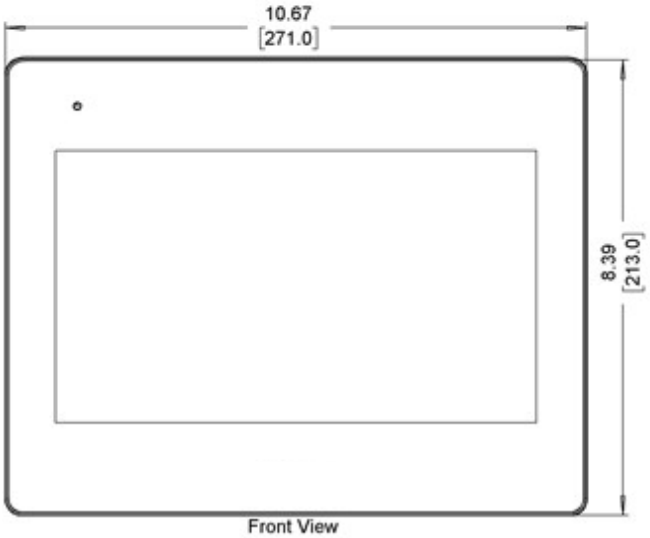
- Quad Core processor allows for the HMI project and PLC project to run on its own processor
- Wireless Compatibility via M02 Wi-Fi Expansion Module*
- High-Speed Screen Update
- Built-In Edge Gateway Function
- E-mail Alarm Notification

| | | |
|---|---|---|
| **System** | **CPU** | Quad-Core RISC |
| | **Memory (RAM)** | 1 GB |
| | **Memory (Flash)** | 4 GB |
| | **RTC** | Built-in |
| **I/O Ports** | **Serial** | 1 x DE9P COM1: RS-232, COM3: RS-232** |
| | | 1 x DE9S COM2: RS-485 2 or 4 wire, COM3: RS-485 2 wire |
| | **LAN** | 1 x 10/100 Base-T RJ-45, 1 x GbE RJ-45 |
| | **CANbus** | N/A |
| | **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 |
| **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 |
| | **Luminance (cd/m²)** | 350 |
| | **View Angle (H°/V°)** | 160/140 |
| | **Contrast Ratio** | 500:1 |
| | **Backlight Lifetime (Hours)** | 50,000+ |
| **Touch Screen** | **Type** | 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 (70.1 kPa) |
| | **Vibration Endurance** | 10 to 25 Hz (X, Y, Z direction, 2G, 30 minutes) |
| | **Product Carbon Footprint (kg $CO_2$)** | Manufacturing Stage (A1-A3): 36 |
| | **Rating** | UL Type 4X (indoor use only), NEMA 4, IP66 compliant front panel |
| | **Certifications** | cULus, CE, RoHS |
| **Software** | EBPro (v6.08.01 or later), EasyAccess 2.0 (Optional), CODESYS® (Optional), IIoT Ready, MQTT, Sparkplug B, VNC, CMTViewer, WebView | |
| **Notes** | * M02 Wi-Fi Expansion Module (sold separately – see website Product Page or contact Maple Systems for information)<br>**Only Tx and Rx may be used for COM1 RS-232 while COM3 RS-232 is in use.<br>CODESYS® is a trademark of CODESYS GmbH<br>Specifications subject to change without notice | |

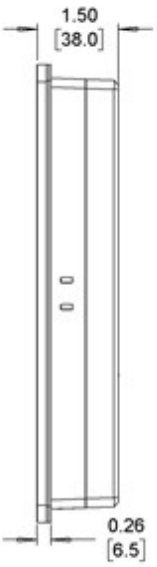


Top View

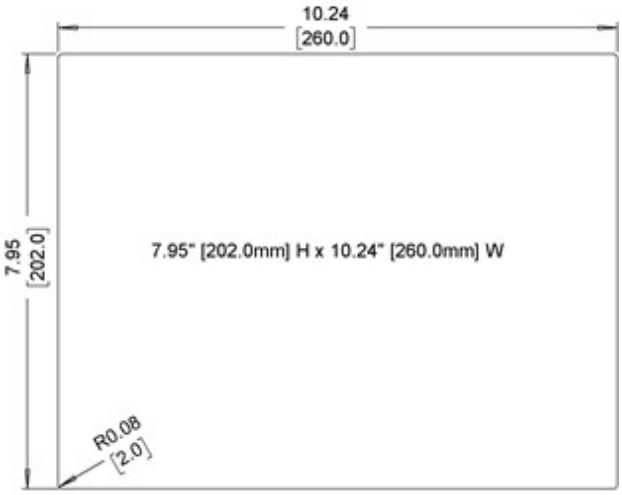
Dimensions are in inches [mm]



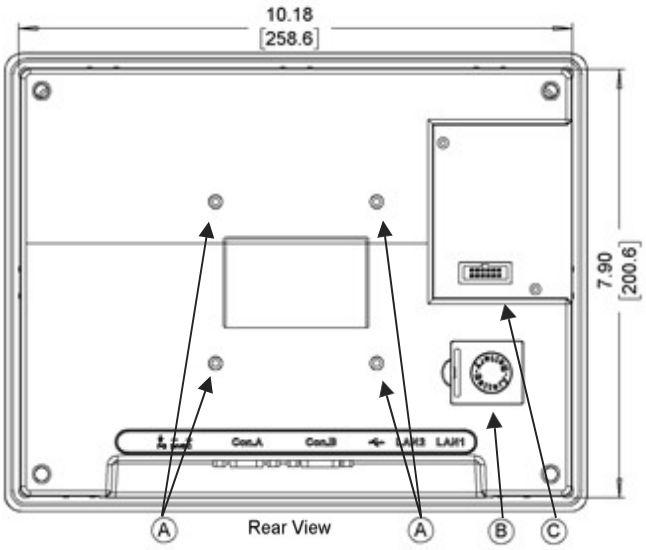

Front View



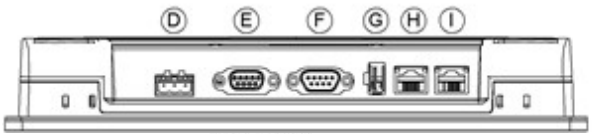

Side View




Cutout Dimensions




Rear View




Bottom View

| | |
|---|---|
| A | VESA 75 mm Screw Holes |
| B | Battery Compartment (CR2032) |
| C | Expansion Module Connector |
| D | Power Connector |
| E | COM Port DE9S |
| F | COM Port DE9P |
| G | USB 2.0 Host Port |
| H | Ethernet Port |
| I | Gigabit Ethernet Port |

# Engineers and Integrators Trust Maple Systems

Control your factory, monitor your data, and connect your world with Maple Systems HMI/cMTs! Our intuitive touchscreen panels, free software, and dedicated support make industrial automation simple and powerful. Wide selection, fast delivery, strong warranty—we're your complete HMI partner.

## Free Configuration Software

**No license or key needed**

Our HMI/cMTs give you the flexibility to create and deploy custom control applications suited to your unique industrial process. Pick and place objects, pictures, and shapes; create trend displays, graphs, XY plots, and pie charts; add passwords and security levels; assign communication (PLC) drivers easily; and more. Our Support Center and Integration sections will walk you through creating your project in minutes instead of days.




Allen-Bradley ABB babcock
BALDOR Danfoss SIEMENS
MITSUBISHI Parker
TOSHIBA YASKAWA Koyo
Matsushita

## Connect to over 400 PLCs and Controllers

**Maximize efficiency**

With over +400 PLC & Controller communication protocols, our HMI/cMTs easily integrate with your preferred PLC brand including Allen-Bradley, Siemens, Omron, Emerson, GE, Maple Systems, Panasonic, Mitsubishi, and all the other major brands. With just a few clicks, creating a powerful edge gateway at a great price has never been easier. See the full list of supported controller manufacturers.

## Build Your Control Panel

**Maximize efficiency**

Let Maple Systems serve as your main provider for optimizing control cabinets, offering industrial-grade hardware designed to maximize space and reduce heat. When building or upgrading an electrical enclosure, selecting components that communicate seamlessly is critical to avoiding component clutter and high integration costs. Maple Systems addresses these cabinet-level challenges directly through compact form factors, DIN-rail mountable solutions, and extensive protocol conversion capabilities

## Improve Operational Efficiency

**Streamlines local or remote data flow**

With the ability to connect to many devices such as PLCs and other network devices, our HMIs provide a visual interface that allows control over small to medium systems. Additionally, our high-performance HMIs include advanced features such as IIoT functionality (MQTT, SQL Databases, OPC UA, etc.), multi-tasking ability, capability to remote access the unit with a Virtual Network Computing (VNC) program, and more.

Maple Systems

# HMI/cMT Feature Overview

| With few exceptions, our Standard HMI/cMTs support (the HMI series and select headless cMT models): | With few exceptions, our Advanced HMI/cMTs support (the cMT2xxx series and select headless cMT models): | With few exceptions, our High-Performance HMI/cMTs support (the cMT3xxx series HMIs and select cMT models): |
|---|---|---|
| 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 Supported) | 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 |
| | Animation (Objects, Word Lamp, GIFs, Moving Shape) | Animation (Objects, Word Lamp, GIFs, Moving Shape) |
| | BACnet | BACnet |
| | cMT Diagnoser | cMT Diagnoser |
| | cMT Viewer Support | cMT Viewer Support |
| | CODESYS Support (1) | CODESYS Support |
| | Email | Email |
| | File Transfer Protocol (FTP) Server | File Transfer Protocol (FTP) Server |
| | IP Camera | IP Camera |
| | Media Player | Media Player |
| | MQTT | MQTT |
| | MQTT - Advanced JSON | MQTT - Advanced JSON |
| | MQTT - AWS IoT, Sparkplig B, Azure IoT Hub | MQTT - AWS IoT, Sparkplig B, Azure IoT Hub |
| | PDF Reader | PDF Reader |
| | String Table | String Table |
| | Time Synchronization | Time Synchronization |
| | USB Camera | USB Camera |
| | VNC Viewer | VNC Viewer |
| | Web Streaming | Web Streaming |
| | WebView | WebView |
| | | Barcode Scanner (Android Camera) |
| | | CANbus |
| | | Database Server |
| | | OPC UA Server |
| | | PLC Web Browser |
| | | SQL 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.

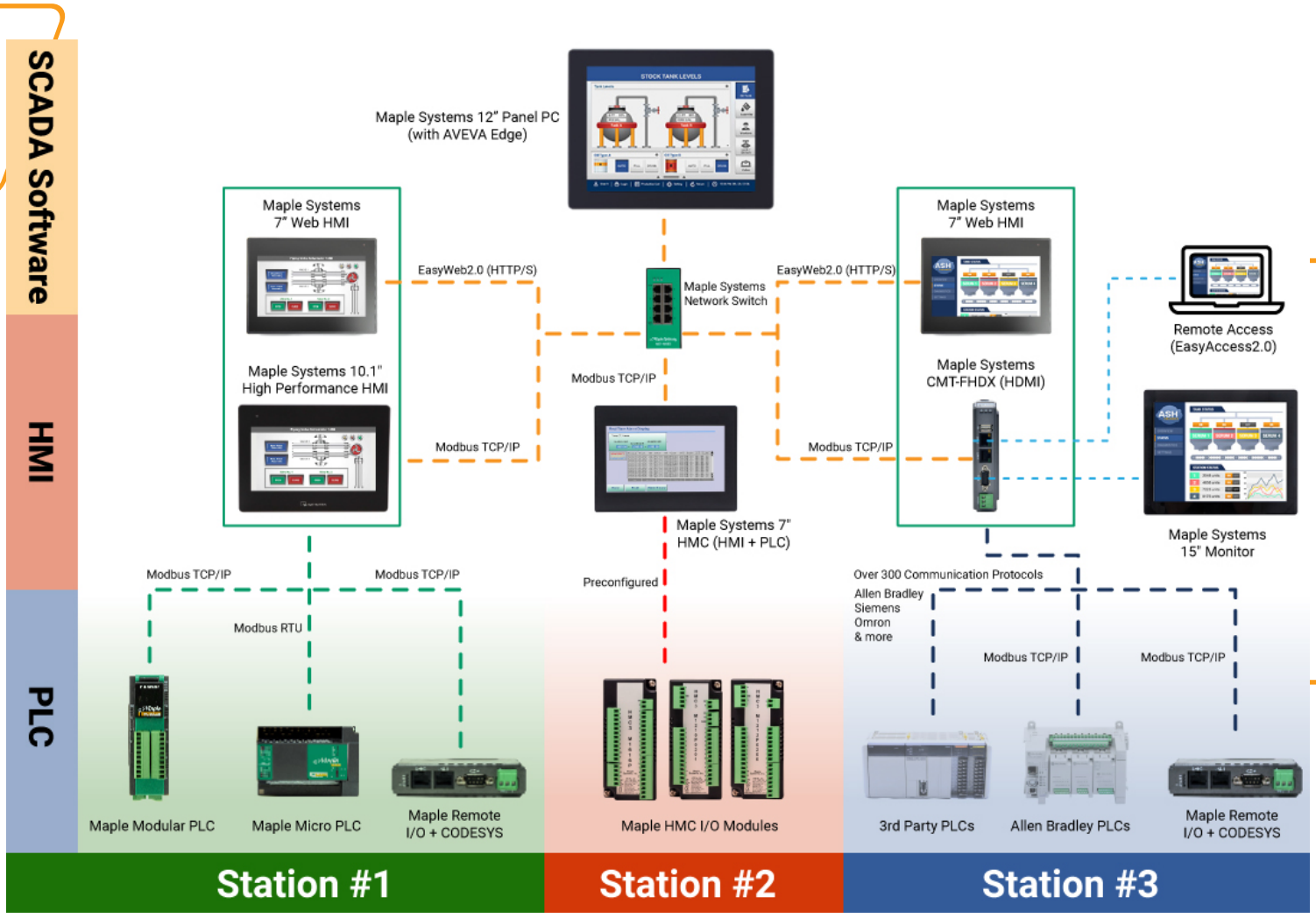
(1) Not supported on the cMT2166X

# Standardizing SCADA Communications with Maple Systems Components

From simple stand-alone machines to sophisticated multi-device networked production lines, Maple Systems solutions empower your facility with enterprise-level operations and IIoT functionalities. Leveraging advanced cloud connectivity, Maple Systems hardware and software assist with:

- Logging data from your devices using Maple Systems, smart HMIs and gateways to aid in reporting, improve efficiency, and reduce downtime.
- Planning routine maintenance with ease by tracking system health metrics directly on Maple Systems HMIs and rugged Tablets.
- Adding advanced IIoT functionality via built-in support for MQTT, OPC UA, native Ignition server integration, and secure SQL databases like MySQL or Microsoft SQL Server.

The right Maple Systems products can help you standardize communications between legacy and modern devices, gluing disparate systems together to create a single, unified source for your SCADA ecosystem. There is no need to completely redesign your entire application. Keep the components that are already working for you, and simply add Maple Systems components to grow your abilities to supervise, control, and acquire data.



# Industrial HMI / cMTs

## Industrial Automation and Control Solutions

Imagine a system that seamlessly integrates real-time monitoring, intelligent control, and invaluable data analytics that can boost productivity, efficiency, and overall performance. That's the transformative capabilities of Maple Systems products and US-based technical sales and support.



### HMIs

**IIoT Control for Smart Factories**

Our HMIs have enhanced software features such as remote access, data handling, security, recipes, email, and more. IIoT support for MQTT, Sparkplug B, Ignition SQL, and OPC UA. Class 1, Div 2 options available.



### PLCs

**Modular and Micro Series**

Our PLCs provide an affordable combination of function and control in a cost-effective package. Programmed with our FREE control software, MapleLogic, that features high-speed counters, positioning control, input module filtering, PID control, and more, depending on the model.



### Industrial PCs

**Panel or Box PCs**

Our Industrial PCs are full-strength, fan-less industrial computers with the power to support your SCADA software. Customize to meet your requirements: CPU, storage, memory, OS, and wifi upgrades available.



### HMI + PLCs

**Combining HMI and PLC functionality**

These HMCs are powerful HMIs with I/O and supports high-speed counters and timers, provides serial, Ethernet communications, and support IEC programming. Class I, Division 2. Remote access options available.



### Industrial Monitors

**High Brightness, Wide Temp Options**

Pair a Capacitive Touchscreen Monitor with one of our Industrial Box PCs or HDMI-enabled HMI to expand your project's capabilities. High brightness (1000nit), Wide-Temp, and Class I Division 2 options available.



### Rugged Tablets

**Durability, Performance, and Mobility**

Built for industrial environments and certified to MIL-STD-810H military standards, these tablets feature waterproof enclosures with Gorilla Glass displays that protect against dust, water, and extreme temperatures.



### Network Switches

**Industrial Grade Components**

Our network switches provide a high level of immunity against EMI and EMS found in industrial environments; and include features such as ESD Protection, Surge Protection, and Short Circuit Protection to ensure continuous operation in unstable power conditions. Unmanaged and managed switches available.



### HTML5 Web HMI

**Versatile and secure access to any web page**

Web HMIs come standard with a built-in Chromium Browser, HTML5 Powered, IP66, Class I, Div 2 rating, ensuring intuitive interaction that enables users to access the same web content across many platforms.




### Tower Stack Lights

**Flash patterns and buzzer functions**

Tower stack lights / Signal Towers provide high-visibility visual and audible signaling for clear machine status indication, safety alerts, and efficient industrial communication.



### Pushbuttons

**Dependable control for electrical and automation systems**

Choose momentary or maintained action with options for illuminated, selector, emergency stop, and toggle designs.

### Knowledge Base

**Guides, tutorials, and documentation**

Technical guides and how-to articles for Maple Systems products. Resources and configuration guides including programming basics, setup, communication protocols, software deployment, networking, and so much more!

Schedule a call with one of our product specialists today

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