

# MAPLE SYSTEMS

# SMART cMT BROCHURE

Powerful Industrial Control Solutions

cMT Servers • cMT HMI's • cMT Gateways • cMT Display • cMT Touch Monitor • IIoT Solutions



# MAPLE SYSTEMS

POWERFUL INDUSTRIAL CONTROL SOLUTIONS

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# ABOUT US

## MAPLE SYSTEMS COMPANY PHILOSOPHY

### Maple Systems Specializes in Operator Interface Solutions

We are committed to quality, reliability, and affordability. Our products deliver the quality you deserve, the reliability you demand, with a value that will drive your growth. Whether your customers are residential, commercial, or industrial, you create custom automation and integration solutions, or manufacture products that require 21<sup>st</sup> century control, Maple Systems will add value and improve your user experience.

### We Make Machine Control Easy

With modern touchscreens, unrivaled value and functionality, combined with intuitive software, Maple Systems provides a versatile offering of products to complement your machine's design:

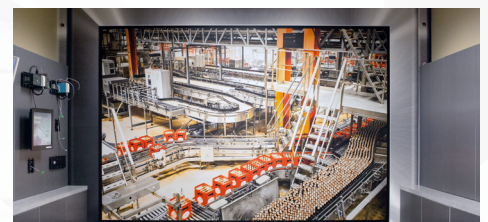
- Touchscreen HMIs
- Open HMIs
- HMI + PLCs
- Smart cMT HMIs
- PLCs
- Industrial Panel PCs
- Industrial Box PCs
- Text-Based Alphanumeric OITs

Our goal is to offer high-quality control solutions at affordable prices. We strive for continuous product improvement by being experts in our field, employing the latest technologies, and ensuring that every product is fully tested and inspected before leaving our facility. Paired with an outstanding support team and our comprehensive technical website, you'll see that Maple Systems truly is *your* industrial control solution.

### Contact Us Today

We invite you to explore our product offerings and contact us to discuss how Maple Systems can help solve and support your automation and control needs:

**Phone:** 425.745.3229  
**Email:** [sales@maplesystems.com](mailto:sales@maplesystems.com)  
**Website:** [www.maplesystems.com](http://www.maplesystems.com)



# cMT OVERVIEW



## Maple Systems - Weintek Strategic Alliance

Maple Systems has been the #1 authority for Weintek products in the North American market for nearly two decades. We have evolved together over the years to provide powerful controllers designed to implement and maintain specific fundamentals, which are recognized today as industry standards.

Weintek's cMT HMI line takes HMIs to the mobile platform, perfectly integrating HMI, tablet, and PC for the ultimate operator interface experience. Weintek Labs sets a precedent in keeping products relevant, compatible, easy-to-use, and above all, reliable—which is why Maple Systems is proud to be Weintek's #1 provider in the US.

## Why cMT?

All the traditional functionality of an HMI plus cMT solutions that are IIoT-ready HMIs, Server HMIs, and Communication Gateways which enable easy monitoring of your industrial plant from a remote device. cMT solutions make it easy to monitor/control your industrial process from remote devices such as PCs, smart phones, and tablets.

## cMT Control for Smart Factories

Technological advances in the fields of IT, personal electronics, and manufacturing are expanding the role of the traditional Human Machine Interface (HMI) in the automation market. Today, there are many more ways in which humans can and want to interface with their machines. It is no longer just an operator physically standing in front of a machine using a touchscreen to control basic operations. HMIs must network to a central location where a plant manager can monitor operations efficiently and receive quick alerts to resolve maintenance issues. OEMs need to monitor and track their equipment remotely and respond to problems without making onsite visits. And, machine operators want to be free to walk around the facility controlling their machines via tablets and smartphones.



The cMT products are designed to meet the expanding need for new ways to connect to equipment, while still preserving the core function of a fixed operator terminal.

The free cMT Viewer application intergrates with our HMI models to enable control and monitoring on any Windows PC, or Apple/Android phone or tablet.

With an extended 2-year warranty on all models, you can enjoy excellent IIoT connectivity with support for many IIoT protocols including MQTT, OPC UA Server, SQL Database Integration, and more.

## cMT Server HMIs



cMT Servers are DIN rail mounted HMIs without a built-in display that allow you to use an Apple or Android phone/tablet to access your industrial control system with the free cMT Viewer app. These smart servers are perfect for systems where a local visual interface is not required and provide all the expected features of a normal HMI plus remote connectivity at an extremely affordable price. cMT Servers can communicate with up to ten remote display devices at one time.

If a local display is still required, Maple's cMT Servers can be paired with the cMT-iV6 9.7" panel-mounted display, or any Maple Panel PC running the cMT Viewer application to provide a traditional touchscreen interface. Additionally, the cMT-FHD model offers a full HD 1080P HDMI® output allowing you to connect any HDMI® compatible display with no size restrictions.



## cMT Touchscreen HMIs

With display sizes ranging from 7 to 15 inches, cMT3000 HMIs offer the convenience of a local HMI display with the added benefit of built-in cMT Server functionality to communicate with remote devices running the cMT Viewer application. These all-in-one solutions also come with EasyAccess 2.0 and OPC UA pre-activated for truly secure remote access.

## cMT Smart Communication Gateways

Designed to add new communications protocols to existing systems, our cMT Gateway products will get your legacy systems talking to your management network in a low cost, low effort way. Unlike other gateway products with limited connectivity, our cMT Gateway models offer the same vast selection of communications drivers available in all our HMI products and can communicate with over 300 brands of controllers and then transmit that data to SCADA and ERP systems using the most popular IIoT protocols.

While these communications gateways do not serve screens to remote devices, they are able to perform the same data acquisition and analysis functions as our standard HMIs, such as storing event logs and alarm notifications, running macros and data transfers, and sending emails. They can also be paired with an EasyAccess 2.0 activation to offer remote access to your connected PLC.



# cMT Server HMIs



## cMT Smart Servers (SVR) Overview

When most people think of an HMI, they visualize a panel-mounted industrial device that has a display and a touchscreen or keypad. What's unique about the cMT server line is that these remote data HMIs have no built-in display. Screens can be designed as usual in easy-to-use configuration software, but to view and control those screens, you would run the cMT Viewer application on a remote device. The robust cMT Server models allow you to connect wirelessly to a variety of devices (via a router) to access your industrial control system. Remotely check for status updates/alarm conditions anywhere on the plant floor using a tablet, smart phone, or laptop.

These compact units can fit into cabinets where space is at a premium and are the most capable HMIs you will see for the price. If your goal is to get data from a control system and you don't need a local visual interface, a cMT Server model is the obvious choice. If you need a local display, simply connect a cMT-iv6 display to achieve this.

## Smart Server (SVR) Basics

All cMT Server models offer DIN rail mounting, dual-Ethernet or Ethernet & Wi-Fi, 3 COM ports on 1 physical serial port, and a USB host port. Connecting the cMT Server to a Wi-Fi router will allow any laptop or smart device on that local network running the cMT Viewer application to connect to the server to view and control screens. All models are IIoT ready with support for MQTT and SQL database integration built-in. OPC UA and EasyAccess 2.0 can be added to each for an additional license fee.

## cMT-SVR (Server) Models

The cMT-SVR comes in multiple configurations. All models have an SD card slot for extra data storage and an extended operating temperature range.

- cMT-SVR-100: Base Model
- cMT-SVR-102: Base with EasyAccess 2.0\* pre-activated
- cMT-SVR-OPCUA: Base with OPC UA Server feature pre-licensed
- cMT-SVR-200: Base Model with Wi-Fi
- cMT-SVR-202: Base with Wi-Fi and EasyAccess 2.0\* pre-activated

\*EasyAccess 2.0 is a secure VPN connection to the cloud



## cMT-SVR (Server) Features

- MQTT
- OPC UA Available
- SQL Database Integration
- EasyAccess 2.0 Ready
- Modbus Gateway
- CE & RoHS Certified
- Barcode Scanner



## cMT-FHD

This HDMI® enabled cMT Server can work with displays of any size and offers a customizable resolution output up to 1080P. It supports touch control via a USB connection with select industrial touchscreen displays. The cMT-FHD is also suitable for use as an Andon system to display productivity information on large TVs. It comes with a high performance Dual-Core Cortex-A9 1GHz CPU, with 4GB Flash and 1GB RAM memory. A wide input voltage range of 10.5 to 28VDC ensures that it is compatible with most controller systems. The cMT-FHD takes your process to the big screen with ease.

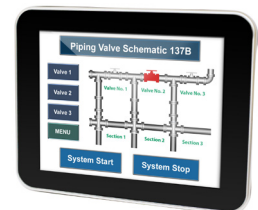
### Features:

- MQTT
- OPC UA Available
- SQL Database Integration
- EasyAccess 2.0 Ready
- CE, & RoHS Certified
- CUPS Ethernet Printer Driver Support
- USB and IP Camera Input
- VNC
- Media Player
- PDF Reader
- Barcode Scanner
- Modbus Gateway



## cMT-iV6 Touch Display

The hardwired cMT-iV6 is a visual touchscreen display that works with any cMT Server or HMI. It boasts a 9.7" 1024 x 768 pixel touchscreen. Durable 7H tempered glass and multiple certifications (CE, RoHS, NEMA 4) ensure this unit will thrive in tough industrial environments. The slim, lightweight model is easily mounted to a panel and hardwired via Ethernet cable to receive data from the cMT series HMI. With a high-speed 1GHz microprocessor and 4GB of memory for complex graphic-intensive projects, this local display delivers high-tech performance to any operator.



## cMT-iM21 Touch Monitor

The cMT-iM21 is a 21.5" high-definition capacitive touchscreen monitor designed to work with the cMT-FHD and can also be used with any HDMI® output device. Integrated brightness controls are available when paired with a cMT-FHD. There is also an additional USB host port from the display when the cMT-FHD's USB port is used for touch control.

Equipped with HDMI® video input and a full HD (1920 x 1080 pixel) display, this touchscreen monitor is able to display many user interface elements and large amounts of data with stunning clarity. It features a tough aluminum enclosure, 6H anti-scratch tempered glass surface, and a NEMA4/IP65 protection structure to ensure that it can serve as a powerful monitor in harsh industrial environments.



# cMT Touchscreen HMIs



## cMT Touchscreen HMI (cMT3000) Overview

The cMT3000 series has all the features and capabilities available in our Advanced HMI line with the added benefit of built-in cMT Server functionality to communicate with up to nine remote devices running the cMT Viewer application. All models are IIoT ready with support for MQTT, OPC UA, EasyAccess 2.0\*, and SQL database aggregation built-in, providing them the ability to act as an integral gateway between the plant floor and the outside world.

Models come with either dual-Ethernet or a combination of Ethernet and Wi-Fi, ensuring network separation and increased security from unauthorized access. In addition, all models have two physical serial ports, a USB host port, CAN Bus support, and come with high performance Dual-Core Cortex-A9 1GHz CPUs, with 4GB Flash and 1GB RAM memory.

### Additional Features:

- MQTT
- OPC UA Built-in
- SQL Database Integration
- EasyAccess 2.0 Pre-activated\*
- Modbus Gateway
- CAN Bus
- CUPS Ethernet Printer Driver Support
- PDF Reader
- CE, cULus, & RoHS Certified
- Barcode Scanner
- VNC
- USB and IP Camera Input
- Media Player



\*EasyAccess 2.0 is a secure VPN connection to the cloud



### cMT3000 Models

- **cMT3071/cMT3072:** 7” resistive touchscreen display offers dual-Ethernet and a wide power input range, allowing for installations into more diverse environments and control systems. IEC61131-3 programming via an additional CODESYS license. Combine your HMI and PLC logic into one unit.
- **cMT3090:** 9.7” resistive touchscreen display offers dual-Ethernet, as well as a built-in mono speaker for playing sound effects and an SD card slot for expanded memory. IEC61131-3 programming via an additional CODESYS license. Combine your HMI and PLC logic into one unit.
- **cMT3103:** 10.1” resistive touchscreen display offers a wide power input range and Wi-Fi connectivity, allowing for installations into more diverse environments and control systems where running network cabling is not possible.
- **cMT3151:** 15” resistive touchscreen display offers dual-Ethernet, a micro USB client port, a built-in mono speaker as well as a 3.5mm audio out jack, and an SD card slot for expanded memory. IEC61131-3 programming via an additional CODESYS license. Combine your HMI and PLC logic into one unit.

Model Number	Display		Dimensions (W" x H" x D")	Enclosure	Memory	USB	Ethernet	Physical Serial Ports	Serial COM Ports	CANbus
	Size	Resolution								
cMT3071	7"	800 x 480	7.89 x 5.76 x 1.38"	Plastic	4 GB/1 GB	1 Host	2	2	3	Yes
cMT3072	7"	1024 x 600	7.89 x 5.76 x 1.38"	Plastic	4 GB/1 GB	1 Host	2	2	3	Yes
cMT3090	9.7"	1024 x 768	10.26 x 8.0 x 1.44"	Plastic	4 GB/1 GB	1 Host	2	2	3	Yes
cMT3103	10.1"	1024 x 768	10.67 x 8.39 x 1.43"	Plastic	4 GB/1 GB	1 Host	1	2	3	Yes
cMT3151	15"	1024 x 768	14.41 x 11.54 x 1.9"	Aluminum	4 GB/1 GB	1 Host	2	2	3	Yes

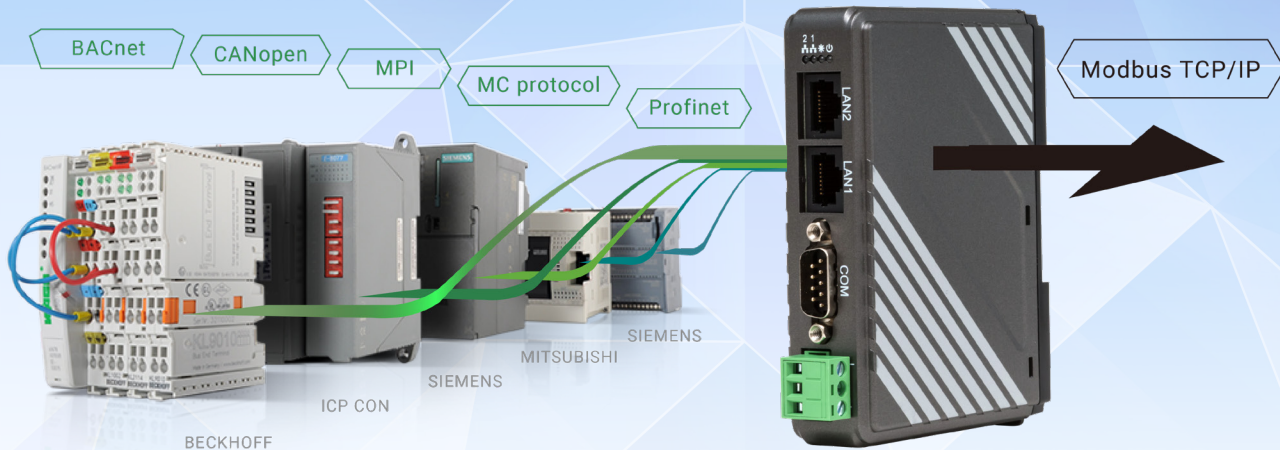
Model Number	SD Card Slot	Certifications	Protection	Audio Out	CUPS Printer Drivers	PDF Reader	Barcode Scanner	VNC Server	Download via USB Port	File Browser
cMT3071	No	CE, cULus, RoHS	IP65 (NEMA 4)	cMT Viewer	Yes	Yes	Yes	Yes	Yes	Yes
cMT3072	No	CE, cULus, RoHS	IP65 (NEMA 4)	cMT Viewer	Yes	Yes	Yes	Yes	Yes	Yes
cMT3090	Yes	CE, cULus, RoHS	IP65 (NEMA 4)	Built-In Speakers	Yes	Yes	Yes	Yes	Yes	Yes
cMT3103	No	CE, cULus, RoHS	IP65 (NEMA 4)	cMT Viewer	Yes	Yes	Yes	Yes	Yes	Yes
cMT3151	Yes	CE, cULus, RoHS	IP65 (NEMA 4)	Built-In Speaker/3.5mm Jack/cMT Viewer	Yes	Yes	Yes	Yes	Yes	Yes

Model Number	SQL Database Server Integration	Media Player (Video)	MQTT (Publisher/Subscriber)	OPC UA Server	EasyAccess 2.0	Picture (Slideshow) Viewer	Pie Chart	USB Camera (Direct)	USB Camera (to Remote Web Browser)
cMT3071	Yes	Yes	Yes	Yes	Available	Yes	Yes	Yes	Yes
cMT3072	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
cMT3090	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
cMT3103	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
cMT3151	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes



# cMT COMMUNICATION GATEWAYS



## Communication Gateway Overview

Integrating miscellaneous legacy equipment for factory automation has never been an easy task. If each machine uses a different controller when integrating with other IT monitoring systems, data aggregation is limited because controllers use different protocols. This is one of the obstacles that makes productivity improvement efforts ineffective.

Take changing parameters as an example: The operator needs to walk to each machine and manually enter parameters. Moreover, due to a lack of data accessibility, the potential problems in the factory may not be easily found and can eventually lead to defective products being made.

With defacto IIoT protocols, MQTT and OPC UA, built in, the communication gateway products fit a variety of applications and can integrate real-time data from different devices to provide a standard communication interface, bringing legacy equipment up to speed simply and quickly.



Use cMT solutions to bring legacy equipment up to **speed**.

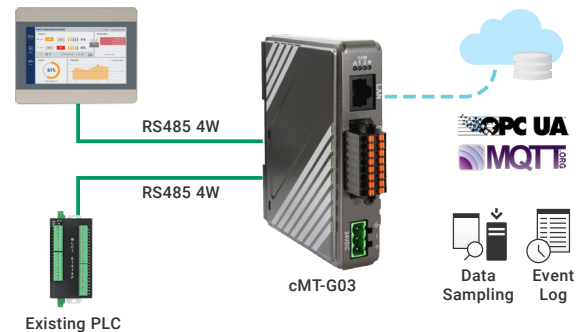




## Data Integration made easy with our IIoT Communication Gateways: Support for OPC UA, MQTT, MODBUS TCP/IP, and Wi-Fi.

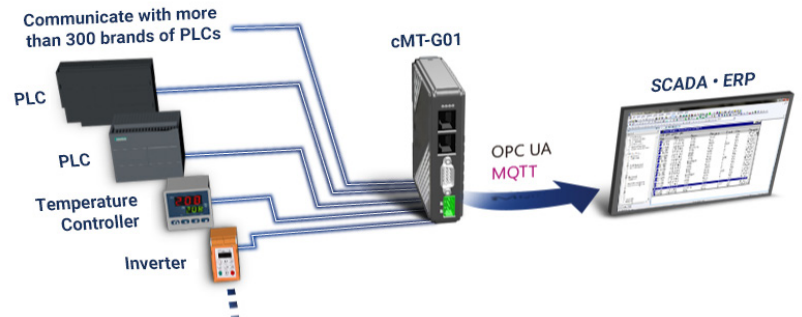
### Communication Gateways

If you're looking for an IIoT gateway with HMI data processing capabilities, explore the Gateway Series. All of our Gateway models offer built-in MQTT, OPC UA, and PLC pass-through and push notifications via EasyAccess 2.0. In addition, the cMT-G02 supports Industrial Wi-Fi. The detachable antenna is compatible with third-party antennas, making it suitable for any environment.



### 300+ Protocol Integration

Unlike other gateway products with limited connectivity, cMT Communication Gateways come standard with drivers to communicate with over 300 brands of controllers. They are then able to transmit data from the controllers to SCADA and ERP systems, which completely integrates multiple devices into one system.

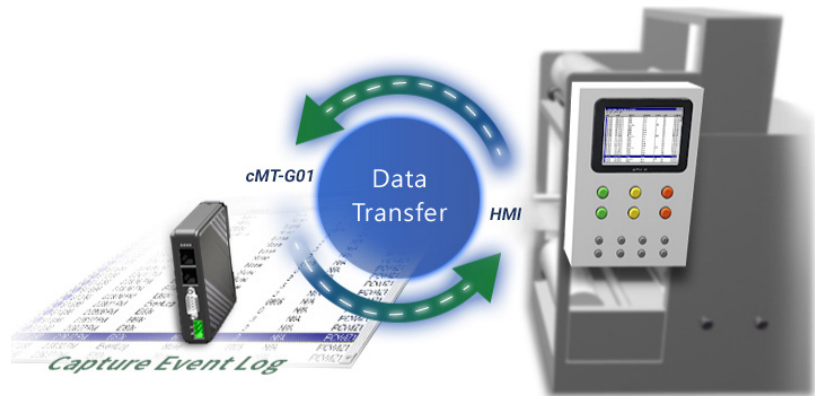


### Real-Time Events and Alarm Notifications

Our Communication Gateways can send emails to inform users about the operational status of onsite machines, and use the MQTT Publish function to send updated data or messages to immediately notify subscribed users. With the EasyAccess 2.0 Push Notification\* function, users can receive immediate notifications about the operation status of onsite machines on their portable devices (iOS & Android), which greatly improves efficiency and reduces loss caused by unplanned downtime.

### Data Acquisition and Analysis

The Communication Gateway products are equipped with the ability to perform data acquisition and analysis functions like an Advanced HMI. They can not only implement Data Transfer (e.g. recipe data) between devices, but it can also run macros to perform mathematical and logical operations, or convert raw data into meaningful information. In addition, these Communication Gateways support the Scheduler feature, triggering events at a specific time.



### Secure Data Transmission

Two major IIoT Protocols, MQTT and OPC UA, are both built into the Communication Gateways and support TLS/SSL certificate systems for transmitting data securely from onsite machines to upper layer systems. In accessing remote devices with EasyAccess 2.0\* via our Communication Gateways, the VPN channel provided by EasyAccess 2.0 is encrypted with TLS/SSL to ensure data integrity.

\*Requires purchase of an EasyAccess 2.0 activation card

# INDUSTRIAL INTERNET OF THINGS



## The Industrial Internet of Things (IIoT) Enables Connection to Your Machines and Data Through the Internet.

The IIoT connects powerful data from a manufacturing environment to informational technologies onsite and in the cloud. It offers improved access to more data, better informed decision-making, increased productivity, and higher profits. Many Maple Systems solutions come IIoT-Ready to meet your needs.

### Your IIoT Partner

Maple Systems can serve as your partner in the IIoT, making your leap to a connected factory an easy one. Our interfaces offer a gateway access point to the IIoT, enabling operating equipment on the plant floor to connect to informational technologies of the world wide web, databases, smart phones, analytics software, and more. Achieve better access to invaluable data and open up a world of possibilities for your business with the IIoT.

Maple Systems IIoT-Ready interfaces offer numerous benefits for OEMs and their customers:

- View how systems are performing and optimize production or machine use to automatically track operations costs.
- A secure connection that safely allows for advanced remote functionality such as push notifications, remote monitoring and programming.
- Reduced on-site visits, travel expenses, and costly downtime with off-site troubleshooting and configuration. Schedule predictive maintenance based on operational data to stay ahead of maintenance issues.



Advanced features  
& affordable prices  
for *any* machine



## Get connected to the IIoT with Maple offerings.

### IIoT Focused

Beyond the immediate benefits, OEMs gain insight and can design future machines according to data collected on how each feature is used; where a machine shines, and where it struggles. Knowing how customers actually use machines allows OEMs to better understand their customers and highlight popular features in their sales and marketing materials.

### EasyAccess 2.0

EasyAccess 2.0 is an IIoT remote access tool connecting users to factory equipment via the cloud. Update your Maple HMI or connected PLC from anywhere in the world. Enjoy easy installation, secure data transmission, and convenient off-site troubleshooting.

### OPC UA

Select Maple HMIs can also be used as an OPC UA (Unified Architecture) server, a simple and effective solution for users requiring communication between on-site machines and management level SCADA systems. OPC UA technology is easy to implement, reduces system integration costs, is firewall-friendly, and allows for secure data transfer.

### MQTT

The MQTT protocol is a lightweight messaging IIoT protocol with established cloud compatibility for transporting large amounts of data securely. All cMT products support the MQTT protocol.

### SQL Database Integration

Equipped with easy-to-use database integration, cMT Series Servers and HMIs can send machine metrics and production data or recipes to an SQL database system directly without any middleware system. That data can then be managed on a larger scale using batch database operations. Plus, the built-in database query viewer enables smooth operations using data on the databases. These features can simplify your processing work and save you precious time. SQL Database integration benefits include:

- SQL scripting is well supported and widely used
- Synchronize data and event logs to a remote SQL server on the local network
- Easily manage the data on your SQL server
  - Supports both MySQL and Microsoft SQL Server databases
- Use third-party software (e.g. Microsoft Excel) to display that information

### Are You IIoT Ready?

The IIoT is just a fancy way of saying you're connected. Connected to machines, connected to data, connected to the Web – worldwide, instantaneously. Maple Systems IIoT solutions ensure an OEM's machines are IIoT-Ready today, so when their customers request this functionality they are prepared today, tomorrow, and well into the future.

# cMT VIEWER

**cMT Viewer:**

## Easy Remote Monitoring

- ▶ PC
- ▶ iPhone/iPad
- ▶ Android Smart Phone/Tablet



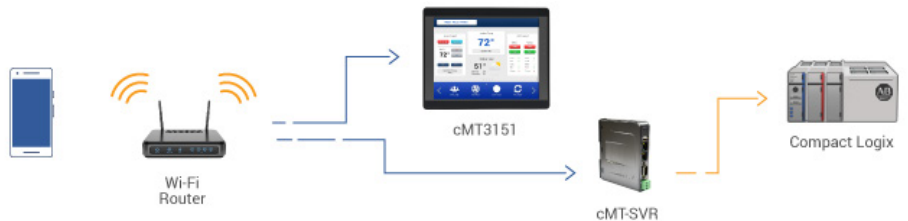
Maple Panel PC

## cMT Viewer Provides an Intuitive Operation Interface and Enables You to Monitor All Your Machines at the Same Time and Quickly Switch Between Machines.

cMT Viewer is a free client application available for Windows and mobile devices that enables users to view and control cMT Servers and HMIs, quickly and easily. cMT Viewer runs the cMT project on the client device. Only application data is exchanged between the cMT hardware, acting as a server, and the client device. This client/server architecture offloads CPU intensive tasks such as rendering project graphics from the cMT hardware to whatever client platform is used to connect to it, freeing up the cMT's CPU for tasks such as PLC communication.

### cMT Viewer will run on the following client platforms:

- Windows
- Android Phones/Tablets
- Apple iPhone/iPad
- cMT-iV6 Touchscreen Display



This enables up to ten client devices to connect

responsive user experience. Conversely, the same client device can be used to connect to any number of cMT servers. The cMT Viewer application in the client device will maintain a history of all cMT servers previously connected to. To switch to a new cMT server, simply select the project from the history list, and the project for the cMT server will start to run.

The cMT Viewer application is available from our website and in the Google Play and iTunes app stores. Simply search for cMT Viewer and follow the installation instructions for your device.

# SUPPORT



## The Maple Standard Represents our Promise to Deliver Quality, Reliability, and Value to Help You Achieve Your Business and Process goals.

### The Maple Standard

Maple Systems is honored to be recognized as a leader in the industrial controls marketplace. The Maple Standard represents our dedication to delivering high-quality control products and unmatched support to our valued customers.

### Comprehensive Website and Support Center

Our online support center allows registered customers 24-hour access to Maple's technical documentation. Explore tech notes, product specifications, sample projects, drivers, and software upgrades anytime. We also offer complimentary technical support to customers via email and phone, as well as training videos, whitepapers, and controller information sheets.

Visit us at [maplesystems.com/support](http://maplesystems.com/support) or email us at [support@maplesystems.com](mailto:support@maplesystems.com) for assistance.

### Contact Us

How can Maple Systems help meet your control needs?  
Contact our industrial automation experts today.

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