WE!NTEK

Industry 4.0
IIoT Platform

# cMT Series

*Edge Computing & Smart Manufacturing*

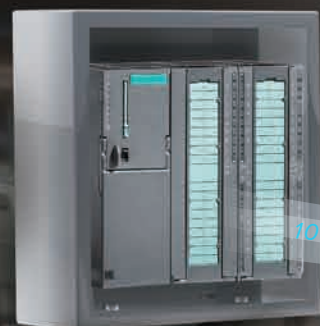# 1

# cMT X Series
## IIoT Edge Computing

Our greatest HMI upgrade ever! cMT X Series not only inherits key HMI features of the predecessors, but also integrates OT in the IIoT.
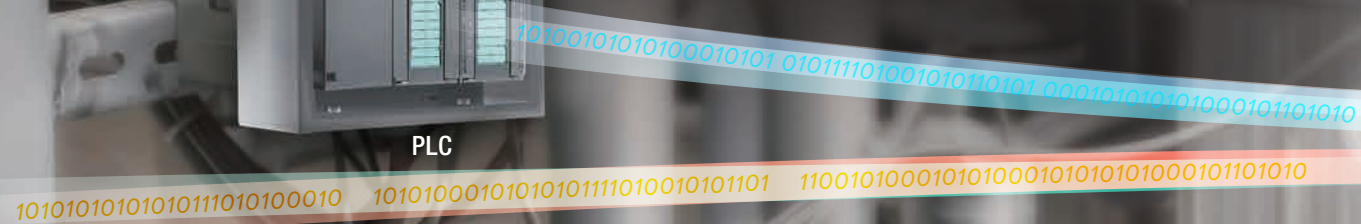
## HMI

▶ Inherits all key features of the predecessors.

▶ Supports more than 300 major brands of PLCs / High performance communication algorithm.

▶ Built-in support for protocols: OPC UA / MQTT / Modbus TCP/IP, allowing data from the connected devices to be uploaded to IIoT datacenter.

▶ Supports EasyAccess 2.0 for remote HMI management and remote multi-passthrough applications.

▶ EasyWeb is a brand new interface that realizes EasyBuilder Pro project configuration and log viewing using a web browser. Industrial cybersecurity is greatly improved with encrypted data transmission.

▶ The superior computing and graphics processing abilities of the quad-core CPU ensure that the cMT X series can operate the EasyBuilder HMI project including animation objects swiftly and smoothly while it runs the CODESYS project at the same time.

▶ By the cutting-edge proprietary technology, the quad-core CPU enables independent operations for PLC communication by EasyBuilder and for I/O module control by CODESYS.

PLC

Remote I/O

## Features

▶ Built-in OPC UA Client / Server which is officially certified by OPC Foundation.

▶ MQTT supports standard protocol, Amazon AWS IoT, Microsoft Azure, IBM Bluemix, Alibaba Cloud, and many other cloud platforms.

▶ Centralized recipe data management, accessing data using ERP, or uploading data to SQL Server using EasyBuilder Pro's SQL feature.

IIoT Platform

MQTT
OPC UA
Modbus

Touch Gesture

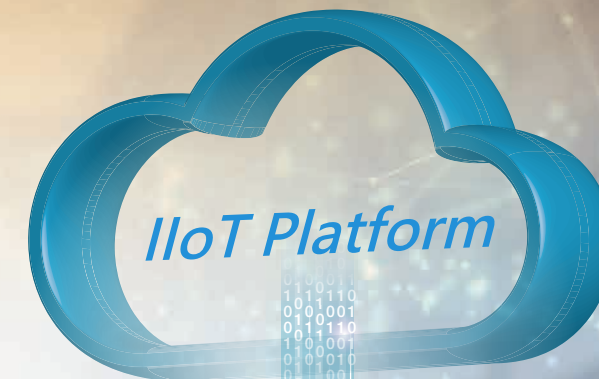cMT3162X supports up to 20 touch gestures to make operating HMI as easy as using a smartphone.

## CODESYS

▶ Powerful CPU can independently run CODESYS controller development system (Optional)

▶ Supports CANopen and ModBus TCP/IP

▶ Supports applications using I/O Modules

▶ cMT3152X / cMT3162X is built with IPS and capacitive type multi-touch screen that supports latest gesture features in EasyBuilder Pro for users to define preferred gestures.

▶ cMT3162X has a built-in vibrator that can feedback touch or event alerts by vibration

# cMT G Series
## IIoT Edge Gateway

Smart communication gateway with outstanding data processing ability
that is able to integrate data from different PLCs and convert protocols to OPC UA / MQTT / ModBus TCP/IP

## Features

▶ cMT G Series with built-in supports for over 300 major brands of PLCs and controllers can integrate real time data from different
   devices and convert protocols to OPC UA / MQTT / Modbus TCP/IP, seamlessly integrating data to IIoT.
▶ Supports synchronizing data log and event log to MySQL, MS SQL database server.
▶ Built-in EasyWeb supports configuration using web browser, available functions include: system settings,
   PLC communication parameter settings, data log and event log management.
▶ The box shaped and 35mm DIN rail mountable design makes the model an easy fit in diverse applications.
▶ Equipped with 2 serial (COM) ports and 1 Ethernet port, cMT-G03 can function as a serial bridge between the existing equipment
   and an upper layer device, just simply by connecting cMT-G03's COM1:IN with the upper layer device (SCADA) and its COM2:OUT
   with the PLC of the existing equipment.

300+ Protocols Supported

MC Protocol
IEC 104
DF1
S7-1200
MPI

**OPC UA**
Built-in OPC UA officially certified for
compliance by the OPC Foundation.
OPC UA is a machine to machine communication
protocol for industrial automation.

*The OPC Foundation compliance logos
are the property of OPC Foundation
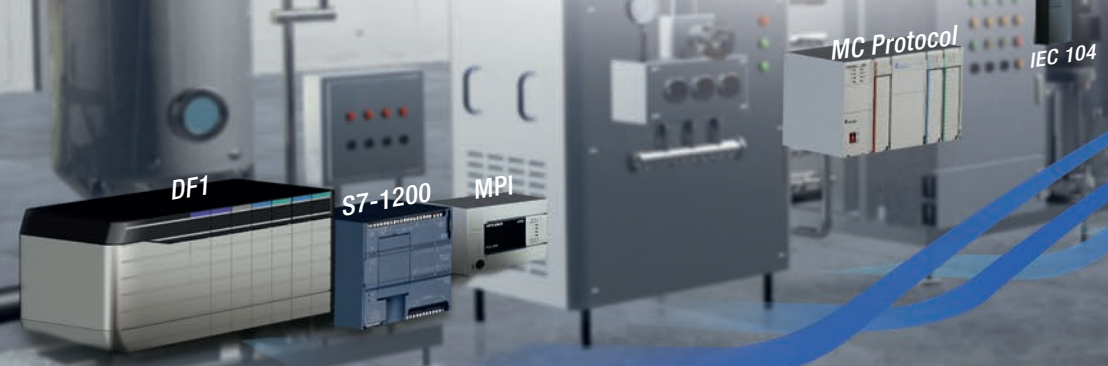and are used under license.

**MQTT**
Built-in MQTT,
which is a subscriber / publisher messaging
transport protocol designed to be light weight,
open and simple.

**3 major industrial communication protocols**

**Modbus**
MODBUS(TCP/IP) is a commonly available communication protocol
enabling high speed communication among on-site devices.

## cMT-G01
LAN 1 : 10/100/1000 Base-T x 1
LAN 2 : 10/100 Base-T x 1

COM 1 : RS-232 2W
COM 2 : RS-485 2W/4W
COM 3 : RS-485 2W

## cMT-G02
10/100 Base-T x 1

IEEE 802.11 b/g/n
COM 1 : RS-232 2W
COM 2 : RS-485 2W/4W
COM 3 : RS-485 2W

## cMT-G03
10/100 Base-T x 1

COM 1 : RS-232 2W, RS-485 2W/4W
COM 2 : RS-232 2W, RS-485 2W/4W

## cMT-G04
LAN: 10/100 Base-T x 1
SW1, SW2: 10/100 Base-T x 1
(2 port Ethernet switch)

# 3 cMT-CTRL+iR Series
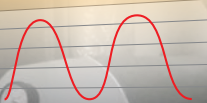## IIoT Gateway / Motion Control / Remote I/O

**IIoT**

**Heater Portion Valve**

SV 41.19 °C
PV 41.12 °C

*EasyBuilder Pro* | CODESYS

### cMT-CTRL01
IIoT Programmable Logic Controller that integrates CODESYS and Gateway.

### iR Series
▶ Communication controllers that support Modbus TCP/IP, CANopen, and EtherCat.
▶ iR-PU01-P Motion Control Module
▶ iR Digital / Analog IO Modules
▶ iR-AI04-TR Temperature Module

* CODESYS® is a trademark of 3S-Smart Software Solutions GmbH

▶ Dual Ethernet ports can be freely assigned as one Ethernet port for CODESYS and the other one for IIoT Gateway, or both Ethernet ports for IIoT Gateway.
▶ Incompliance with IEC 61131-3 standard, CODESYS supports multiple languages such as FBD/LD/IL/ST/SFC/CFC.
▶ With built-in Modbus TCP/IP Gateway, cMT-CTRL01 can control over 300 major brands of PLCs and controllers.
▶ Supports IIoT protocol standards OPC UA and MQTT, allowing data from the devices to be uploaded to IIoT datacenter.
▶ Supports data sampling and event log functions, and associated historical data can be synchronized to SQL database.

# 4 HMI with External Touch Monitor / TV of Your Own Choice

### Features
**HDMI** HIGH-DEFINITION MULTIMEDIA INTERFACE
▶ Built-in HDMI interface and adjustable resolution up to 1920x1080
▶ Support various industrial touch monitors
▶ Support wide input voltage range 10.5 ~ 28 VDC
▶ Support IIoT Protocol: MQTT

**Full HD 1080**

8 Color Sheet Fed Printing Press
PRINTING EQUIPMENT

### cMT-iM21

*The terms HDMI, HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.
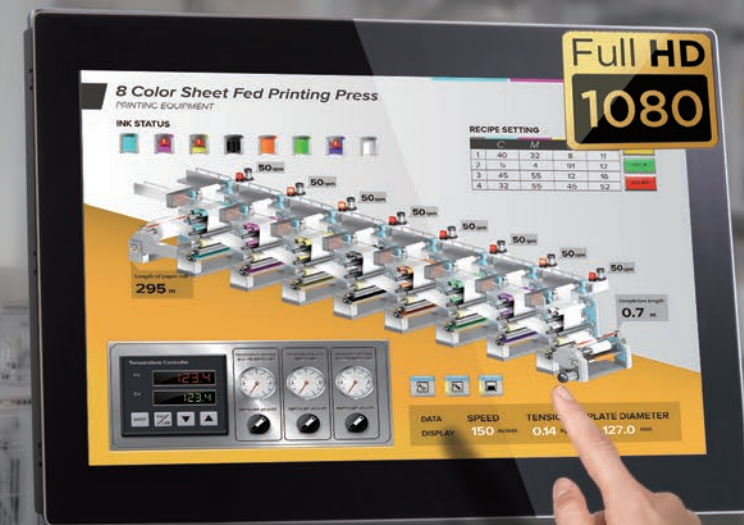
### cMT-FHD
cMT-FHD has inherits all the rich HMI functionality found in the series. Without touchscreen and LCD, this HDMI-enabled unit can work with screens of any size, so that screen size is no longer limited by the HMIs provided on the market. It can also allow touch control via USB connection.

# 5 Smart HMI

## Monitor Mode
### Up to 50 HMIs can be monitored simultaneously.

## EasyLauncher / cMT Viewer

▶ cMT Viewer APP
▶ cMT Smart Monitor and Control - Monitor Mode
▶ Application Management - EasyLauncher

Windows10 I oT | Easy Launcher | cMT Viewer | Monitor Mode

## cMT-iV & cMT-iPC

cMT Series realizes "One Machine to Multi-Screens" architecture that can flexibly suit diverse application. Both of them can run cMT Viewer to display the instant and historical data or operate cMT-SVR. Furthermore, Windows-based cMT-iPC can run third party applications.
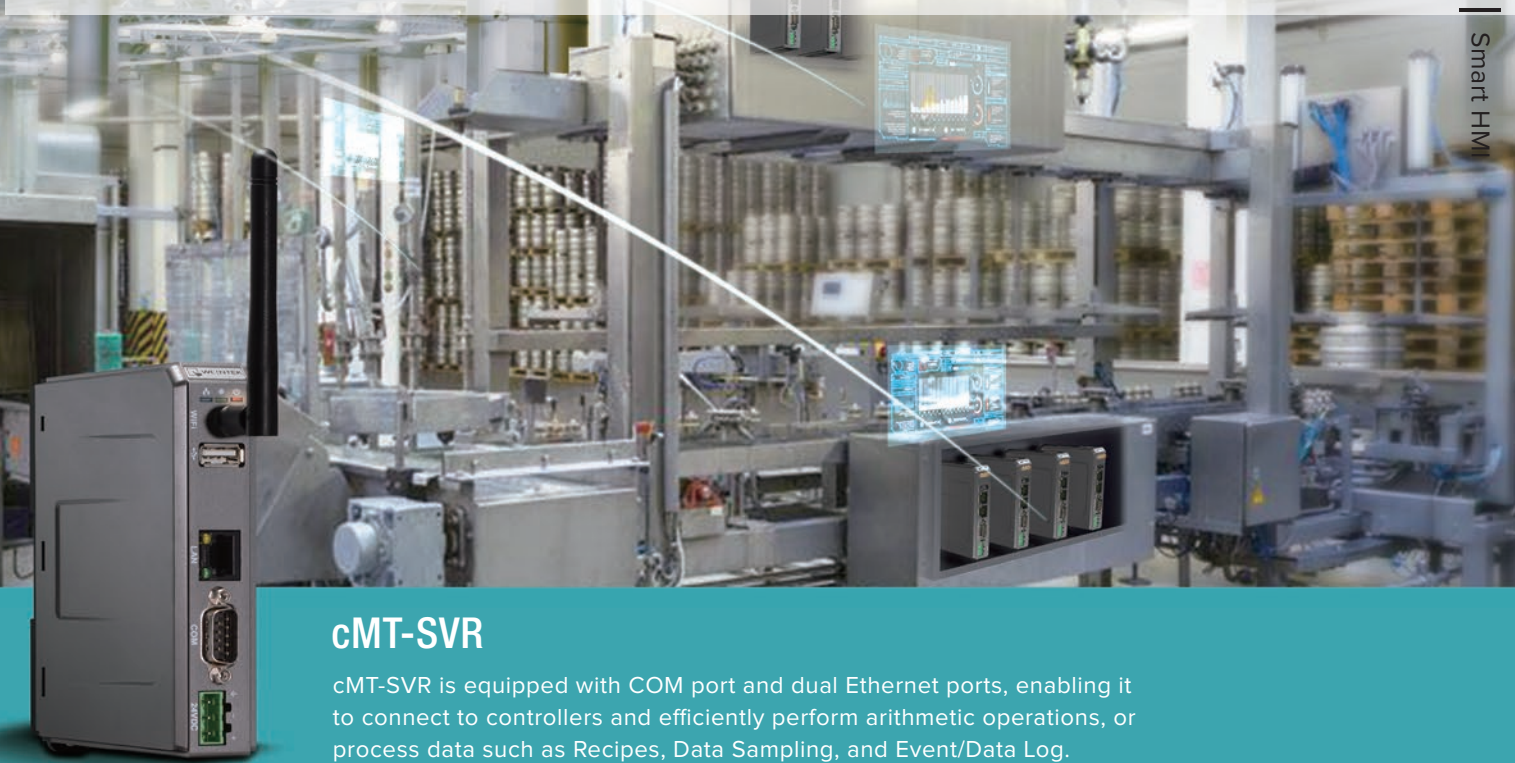
## cMT-SVR

cMT-SVR is equipped with COM port and dual Ethernet ports, enabling it to connect to controllers and efficiently perform arithmetic operations, or process data such as Recipes, Data Sampling, and Event/Data Log.

# 6 EasyAccess 2.0

Alarm
Alarm
Alarm
Alarm

Pipe temp
200℃

## 1. Push Notification

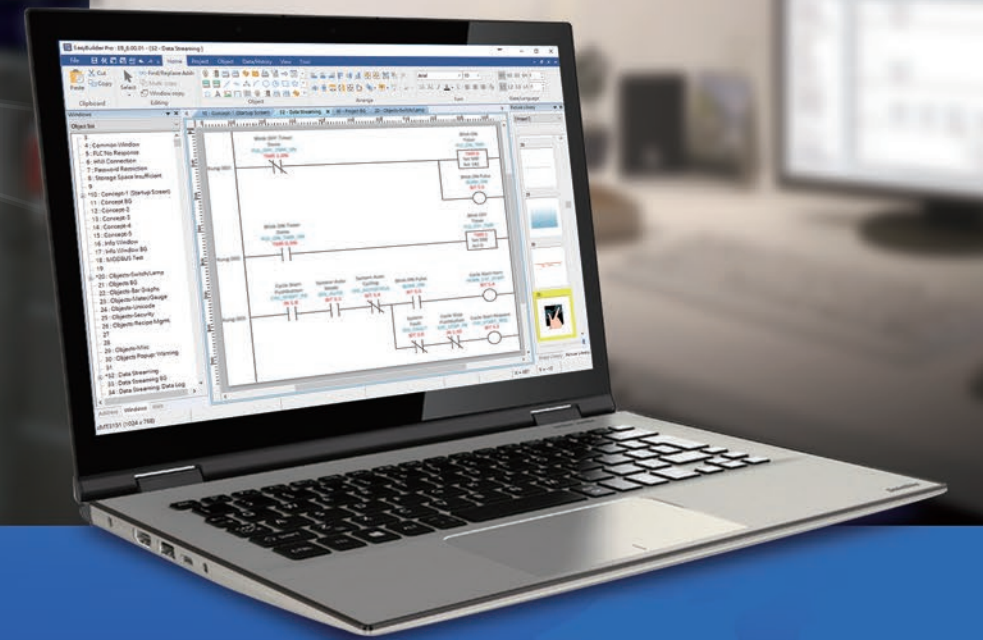▶ Get notified on the mobile phone, wherever you might be.

## 2. Pass-Through

▶ EasyAccess 2.0 can remotely debug or update devices without adjusting firewall settings.

▶ Tune or reprogram remote devices while using their original software.

## 3. Remote Monitoring

▶ Monitor and control the remote machine with VNC or cMT Viewer. (available on PC/ iOS/ Android)
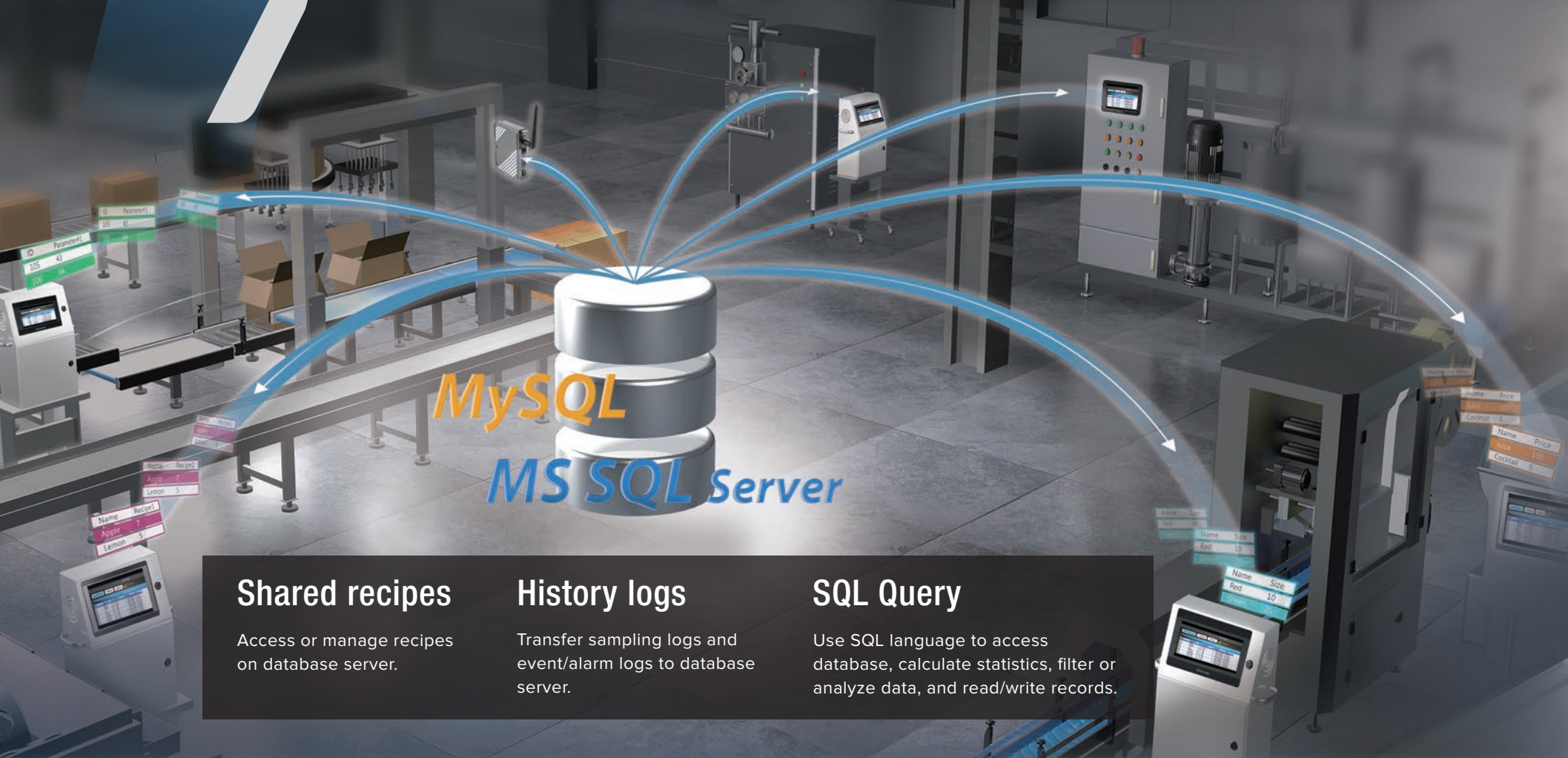
The HMI is not just for operating machines, collecting and managing data, but also plays a key role in IIoT as a Communication Gateway. The data in the device connected to HMI can be published to IIoT system.
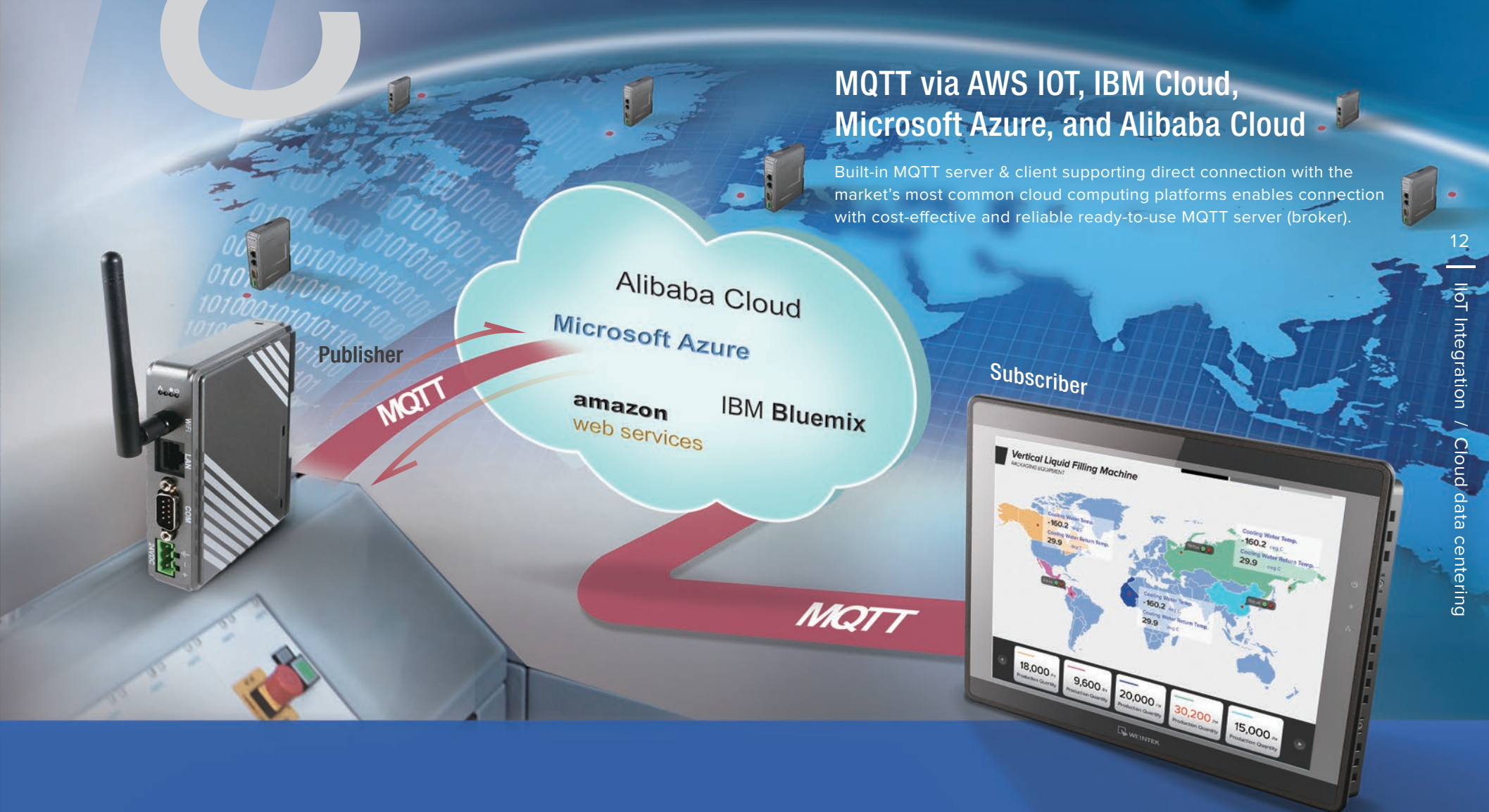
# 7 Database Integration

# 8 Cloud Data Centering

**MQTT via AWS IOT, IBM Cloud, Microsoft Azure, and Alibaba Cloud**

Built-in MQTT server & client supporting direct connection with the market's most common cloud computing platforms enables connection with cost-effective and reliable ready-to-use MQTT server (broker).

MySQL
MS SQL Server

### Shared recipes
Access or manage recipes on database server.

### History logs
Transfer sampling logs and event/alarm logs to database server.

### SQL Query
Use SQL language to access database, calculate statistics, filter or analyze data, and read/write records.

Alibaba Cloud
Microsoft Azure
amazon web services
IBM Bluemix

Publisher

MQTT

Subscriber

MQTT

Vertical Liquid Filling Machine

18,000    9,600    20,000    30,200    15,000

## Database Integration

HMIs can access data, records, or recipes from a database server directly. HMIs send SQL (Structured Query Language) queries to read or write database records. Built-in data samplings and event logs can also be synchronized automatically to database servers.

* IBM, Bluemix and IBM Bluemix are trademarks of International Business Machines Corporation, registered in many jurisdictions worldwide.

* Amazon Web Services is a trademark of Amazon.com,Inc. or its affiliates in the United States and/or other countries.

12 | IIoT Integration / Cloud data centering

# Specification

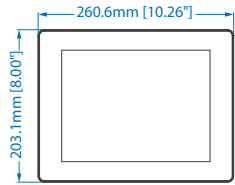| Model | | cMT3092X | cMT3152X | cMT3162X |
|---|---|---|---|---|
| **Display** | Display | 9.7″ TFT | 15″ IPS | 15.6″ IPS |
| | Resolution | 1024 x 768 | 1024 x 768 | 1920 x 1080 |
| | Brightness (cd/ ㎡ ) | 350 | 400 | 300 |
| | Contrast Ratio | 500:1 | 1000: 1 | 800: 1 |
| | Backlight Type | LED | LED | LED |
| | Backlight Life Time | >30,000 hrs. | >50,000 hrs. | >30,000 hrs. |
| | Colors | 262K | 16.2M | 16.2M |
| | LCD Viewing Angle (T/B/L/R) | 60/70/70/70 | 89/89/89/89 | 89/89/89/89 |
| | Pixel Pitch (mm) | 0.192(H) x 0.192(V) | 0.297(H) x 0.297(V) | 0.17925(H) x 0.17925(V) |
| **Touch Panel** | Type | 4-wire Resistive Type | Tempered Glass, Capacitive Type* Hardness Scale 7H | Tempered Glass, Capacitive Type* Hardness Scale 7H |
| | Accuracy | Active Area Length(X)±2%, Width(Y)±2% | N/A | N/A |
| **Memory** | Flash | 4 GB | 4 GB | 4 GB |
| | RAM | 1 GB | 1 GB | 1 GB |
| **Processor** | | Quad-core 32-bit RISC 1.6GHz | Quad-core 32-bit RISC 1.6GHz | Quad-core 32-bit RISC 1.6GHz |
| **I/O Port** | SD Card Slot | N/A | SD/SDHC | N/A |
| | USB Host | USB 2.0 x 1 | USB 2.0 x 1 | USB 2.0 x 1 |
| | Ethernet | LAN 1: 10/100/1000 Base-T x 1 LAN 2: 10/100 Base-T x 1 | LAN 1: 10/100/1000 Base-T x 1 LAN 2: 10/100 Base-T x 1 | LAN 1: 10/100/1000 Base-T x 1 LAN 2: 10/100 Base-T x 1 |
| | COM Port | Con.A: COM2 RS-485 2W/4W, COM3 RS-485 2W, CAN Bus Con.B: COM1 RS-232 4W, COM3 RS-232 2W* | Con.A: COM1 RS-485 2W/4W, COM3 RS-485 2W, CAN Bus Con.B: COM1 RS-232 4W, COM3 RS-232 2W* | Con.A: COM1 RS-485 2W/4W, COM3 RS-485 2W, CAN Bus Con.B: COM1 RS-232 4W, COM3 RS-232 2W* |
| | RS-485 Dual Isolation | N/A | Yes | N/A |
| | CAN Bus | Yes | Yes | Yes |
| | Audio Output | Built-in Mono Speaker | Built-in Mono Speaker Audio Line Out - 3.5 mm jack x 1 | Built-in Mono Speaker |
| **RTC** | | Built-in | Built-in | Built-in |
| **Power** | Input Power | 24±20%VDC | 24±20%VDC | 24±20%VDC |
| | Power Isolation | Built-in | Built-in | Built-in |
| | Power Consumption | 1A@24VDC | 1.3A@24VDC | 1.3A@24VDC |
| | Voltage Resistance | 500VAC (1 min.) | 500VAC (1 min.) | 500VAC (1 min.) |
| | Isolation Resistance | Exceed 50MΩ @ 500VDC | Exceed 50MΩ @ 500VDC | Exceed 50MΩ @ 500VDC |
| | Vibration Endurance | 10 to 25Hz (X, Y, Z direction 2G 30 minutes) | 10 to 25Hz (X, Y, Z direction 2G 30 minutes) | 10 to 25Hz (X, Y, Z direction 2G 30 minutes) |
| **Specification** | PCB Coating | Yes | Yes | Yes |
| | Enclosure | Plastic | Front bezel: Plastic, Rear Enclosure: Aluminum | Front bezel: Plastic, Rear Enclosure: Aluminum |
| | Dimensions WxHxD | 260.6 x 203.1 x 44.5 mm | 366 x 293 x 51.5 mm | 400 x 263 x 26.1 mm |
| | Panel Cutout | 250 x 192 mm | 352 x 279 mm | 384 x 247 mm |
| | Weight | Approx. 1 kg | Approx. 2.75 kg | Approx. 1.6 kg |
| | Mount | Panel mount, VESA mount 75 x 75 mm | Panel mount, VESA mount 75 x 75 mm | Panel mount, VESA mount 100 x 100 mm |
| **Environment** | Protection Structure | NEMA4 / IP65 Compliant Front Panel | NEMA4 / IP65 Compliant Front Panel | NEMA4 / IP65 Compliant Front Panel |
| | Storage Temperature | -20° ~ 60° C (-4° ~ 140° F) | -20° ~ 60° C (-4° ~ 140° F) | -20° ~ 60° C (-4° ~ 140° F) |
| | Operating Temperature | 0° ~ 50° C (32° ~ 122° F) | 0° ~ 50° C (32° ~ 122° F) | 0° ~ 50° C (32° ~ 122° F) |
| | Relative Humidity | 10% ~ 90% (non-condensing) | 10% ~ 90% (non-condensing) | 10% ~ 90% (non-condensing) |
| **Certificate** | CE | CE marked | CE marked | CE marked |
| | UL | | | |
| **Software** | | EasyBuilder Pro Built-in EasyAccess 2.0 CODESYS (Optional) | EasyBuilder Pro Built-in EasyAccess 2.0 CODESYS (Optional) | EasyBuilder Pro Built-in EasyAccess 2.0 CODESYS (Optional) |

*cMT3092X/ cMT3152X/ cMT3162X: Only Tx & Rx (no RTS/CTS) may be used for COM1 RS-232 when COM3 RS-232 is also used.
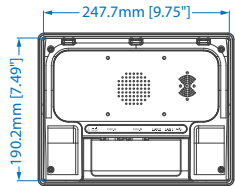*cMT3152X / cMT3162X : Supports multi-touch gestures.
*cMT3162X: Supports vibrational feedback.
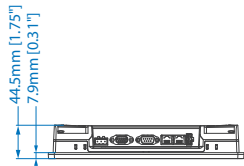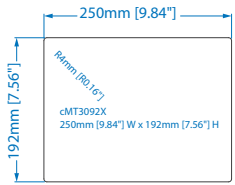
# Dimensions

| cMT3092X | cMT3152X | cMT3162X |
|---|---|---|
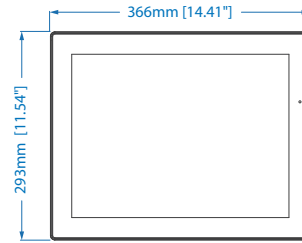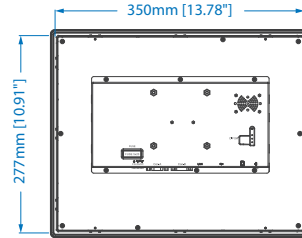
**cMT3092X**

260.6mm [10.26"]

203.1mm [8.00"]

Front View

247.7mm [9.75"]

190.2mm [7.49"]

Rear View

44.5mm [1.75"]
7.9mm [0.31"]

Bottom View

250mm [9.84"]

R4mm [R0.16"]

192mm [7.56"]

cMT3092X
250mm [9.84"] W x 192mm [7.56"] H

Cutout Dimensions

**cMT3152X**

366mm [14.41"]

293mm [11.54"]

Front View

350mm [13.78"]

277mm [10.91"]

Rear View

51.5mm [2.03"]
27.6mm [1.09"]
9.6mm [0.38"]

Panel-mounting
clamp slots, 12 places

Bottom View

352mm [13.86"]

279mm [10.98"]

cMT3152X :
352mm [13.86"] W x 279mm [10.98"] H

Cutout Dimensions

**cMT3162X**

400mm [15.75"]

236mm [10.35"]

Front View

382mm [15.03"]

100mm [3.94"]

245mm [9.64"]

100mm [3.94"]

Rear View

23.4mm [0.92"]
15mm [0.59"]

26.1mm [1.03"]

Bottom View

384mm [15.12"]

247mm [9.72"]
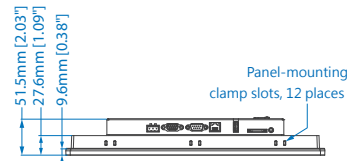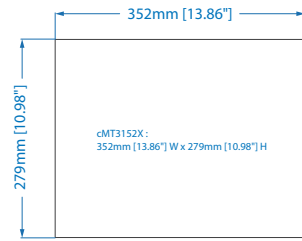
cMT3162X :
384mm [15.12"] W x 247mm [9.72"] H
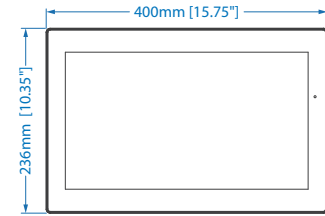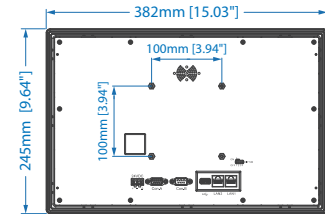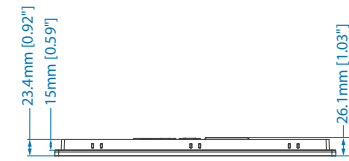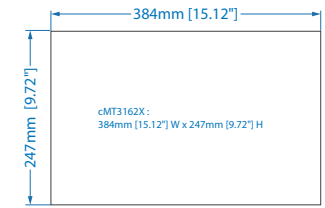
Cutout Dimensions

# Specification

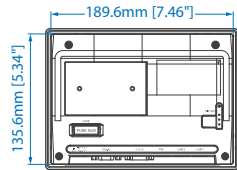| Model | cMT3071 | cMT3072 | cMT3103 |
|---|---|---|---|
| **Display** | | | |
| Display | 7″  TFT | 7″  IPS | 10.1″  TFT |
| Resolution | 800 x 480 | 1024 x 600 | 1024 x 600 |
| Brightness (cd/ ㎡ ) | 400 | 450 | 350 |
| Contrast Ratio | 800: 1 | 800: 1 | 500:1 |
| Backlight Type | LED | LED | LED |
| Backlight Life Time | >30,000 hrs. | >25,000 hrs. | >50,000 hrs. |
| Colors | 16.7M | 16.7M | 16.7M |
| LCD Viewing Angle (T/B/L/R) | 60/80/80/80 | 85/85/85/85 | 60/60/70/70 |
| Pixel Pitch (mm) | 0.1926 (H) x 0.179(V) | 0.1506(H) x 0.1432(V) | N/A |
| **Touch Panel** | | | |
| Type | 4-wire Resistive Type | 4-wire Resistive Type | 4-wire Resistive Type |
| Accuracy | Active Area Length(X)±2%, Width(Y)±2% | Active Area Length(X)±2%, Width(Y)±2% | Active Area Length(X)±2%, Width(Y)±2% |
| **Memory** | | | |
| Flash | 4 GB | 4 GB | 4 GB |
| RAM | 1 GB | 1 GB | 1 GB |
| **Processor** | 32-bit RISC 1GHz | 32-bit RISC 1GHz | 32-bit RISC 1GHz |
| **I/O Port** | | | |
| USB Host | USB 2.0 x 1 | USB 2.0 x 1 | USB 2.0 x 1 |
| Ethernet | LAN 1: 10/100/1000 Base-T x 1<br>LAN 2: 10/100 Base-T x 1 | LAN 1: 10/100/1000 Base-T x 1<br>LAN 2: 10/100 Base-T x 1 | 10/100 Base-T x 1 |
| Wi-Fi | N/A | N/A | IEEE 802.11 b/g/n<br>802.11b: max 19.25 dBm<br>802.11g: max 13.74 dBm<br>802.11n: max 15.01 dBm |
| COM Port | Con.A: COM2 RS-485 2W/4W, COM3 RS-485 2W, CAN Bus<br>Con.B: COM1 RS-232 4W, COM3 RS-232 2W* | Con.A: COM2 RS-485 2W/4W, COM3 RS-485 2W, CAN Bus<br>Con.B: COM1 RS-232 4W, COM3 RS-232 2W* | Con.A: COM2 RS-485 2W/4W, COM3 RS-485 2W, CAN Bus<br>Con.B: COM1 RS-232 4W, COM3 RS-232 2W* |
| CAN Bus | Yes | Yes | Yes |
| **RTC** | Built-in | Built-in | Built-in |
| **Power** | | | |
| Input Power | 10.5~28VDC | 10.5~28VDC | 10.5~28VDC |
| Power Isolation | Built-in | Built-in | Built-in |
| Power Consumption | 2A@12VDC ; 1A@24VDC | 2A@12VDC ; 1A@24VDC | 2A@12VDC ; 1A@24VDC |
| Voltage Resistance | 500VAC (1 min.) | 500VAC (1 min.) | 500VAC (1 min.) |
| Isolation Resistance | Exceed 50MΩ @ 500VDC | Exceed 50MΩ @ 500VDC | Exceed 50MΩ @ 500VDC |
| Vibration Endurance | 10 to 25Hz (X, Y, Z direction 2G 30 minutes) | 10 to 25Hz (X, Y, Z direction 2G 30 minutes) | 10 to 25Hz (X, Y, Z direction 2G 30 minutes) |
| **Specification** | | | |
| PCB Coating | Yes | Yes | Yes |
| Enclosure | Plastic | Plastic | Plastic |
| Dimensions WxHxD | 200.3 x 146.3 x 35.0 mm | 200.3 x 146.3 x 35.0 mm | 271 x 213 x 36.4 mm |
| Panel Cutout | 192 x 138 mm | 192 x 138 mm | 260 x 202 mm |
| Weight | Approx. 0.6 kg | Approx. 0.6 kg | Approx. 1.07 kg |
| Mount | Panel mount | Panel mount | Panel mount |
| **Environment** | | | |
| Protection Structure | UL Type 4X (indoor use only) / NEMA4 / IP65 Compliant Front Panel | UL Type 4X (indoor use only) / NEMA4 / IP65 Compliant Front Panel | NEMA4 / IP65 Compliant Front Panel |
| Storage Temperature | -20° ~ 60° C (-4° ~ 140° F) | -20° ~ 60° C (-4° ~ 140° F) | -20° ~ 60° C (-4° ~ 140° F) |
| Operating Temperature | 0° ~ 50° C (32° ~ 122° F) | 0° ~ 50° C (32° ~ 122° F) | 0° ~ 50° C (32° ~ 122° F) |
| Relative Humidity | 10% ~ 90% (non-condensing) | 10% ~ 90% (non-condensing) | 10% ~ 90% (non-condensing) |
| **Certificate** | | | |
| CE | CE marked | CE marked | CE marked |
| UL | cULus Listed | cULus Listed | cULus Listed |
| **Software** | EasyBuilder Pro<br>EasyAccess 2.0 (Optional)<br>CODESYS (Optional) | EasyBuilder Pro<br>Built-in EasyAccess 2.0<br>CODESYS (Optional) | EasyBuilder Pro<br>Built-in EasyAccess 2.0 |

*cMT3071/ cMT3072/ cMT3103: Only Tx & Rx (no RTS/CTS) may be used for COM1 RS-232 when COM3 RS-232 is also used.
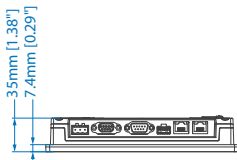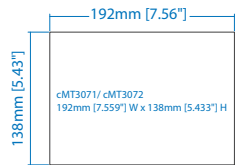
# Dimensions

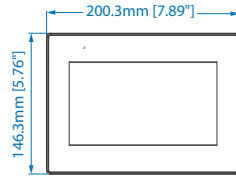| cMT3071 | cMT3072 | cMT3103 |
|---------|---------|---------|
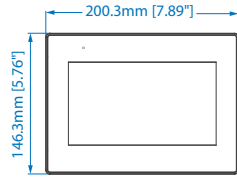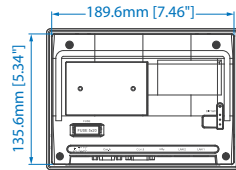


**cMT3071**

200.3mm [7.89"]

146.3mm [5.76"]

Front View

189.6mm [7.46"]

135.6mm [5.34"]

Rear View

35mm [1.38"]
7.4mm [0.29"]

Bottom View

192mm [7.56"]

138mm [5.43"]

cMT3071/ cMT3072
192mm [7.559"] W x 138mm [5.433"] H

Cutout Dimensions

**cMT3072**

200.3mm [7.89"]

146.3mm [5.76"]

Front View

189.6mm [7.46"]

135.6mm [5.34"]

Rear View

35mm [1.38"]
7.4mm [0.29"]

Bottom View

192mm [7.56"]

138mm [5.43"]

cMT3071/ cMT3072
192mm [7.559"] W x 138mm [5.433"] H

Cutout Dimensions

**cMT3103**

271mm [10.67"]

213mm [8.38"]

Front View

258.6mm [10.18"]

200.6mm [7.90"]

Rear View

36.4mm [1.43"]
4.5mm [0.18"]
23.5mm [0.93"]
8.36mm [0.33"]

Bottom View

260mm [10.24"]

R2mm [R0.08"]

202mm [7.95"]
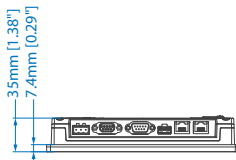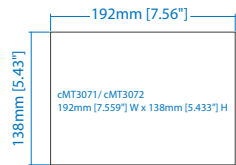
cMT3103
260mm [10.24"] W x 202mm [7.95"] H
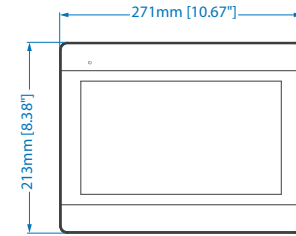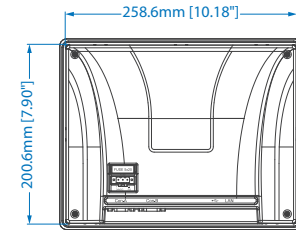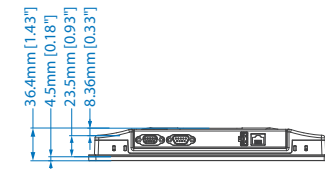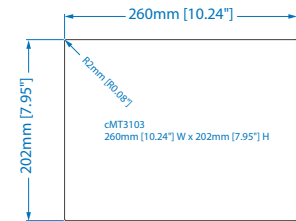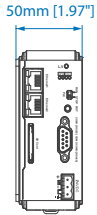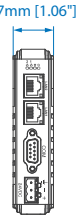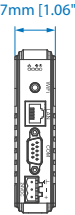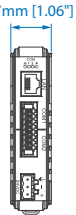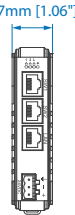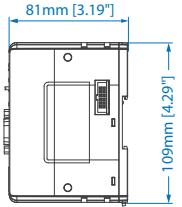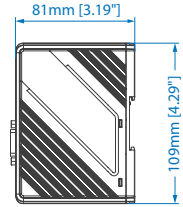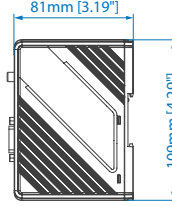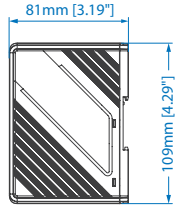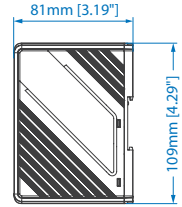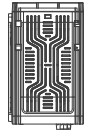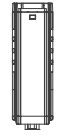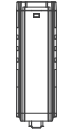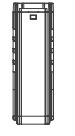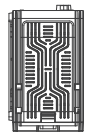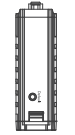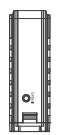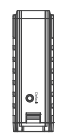
Cutout Dimensions

# Specification

| | Model | cMT-CTRL01 | cMT-G01 | cMT-G02 | cMT-G03 | cMT-G04 |
|---|---|---|---|---|---|---|
| **Memory** | Flash | 4 GB | 256 MB | 256 MB | 256 MB | 256 MB |
| | RAM | 512 MB | 256 MB | 256 MB | 256 MB | 256 MB |
| | Data, Memory, Code | 3 MB | N/A | N/A | N/A | N/A |
| | Retain area | 16 KB (every minute) (Kept after reboots) | N/A | N/A | N/A | N/A |
| | Persistent area | 16 KB (every minute) (Kept after downloads) | N/A | N/A | N/A | N/A |
| | File system | 8MB | N/A | N/A | N/A | N/A |
| **Processor** | | Dual-Core 32 bits RISC 1GHz | 32-bit RISC 600MHz | 32-bit RISC 600MHz | 32-bit RISC 528MHz | 32-bit RISC 528MHz |
| **I/O Port** | SD Card Slot | SD/SDHC | N/A | N/A | N/A | N/A |
| | Ethernet | Ethernet 1: 10/100/1000 Base-T x 1 Ethernet 2: 10/100 Base-T x 1 | LAN 1: 10/100/1000 Base-T x 1 LAN 2: 10/100 Base-T x 1 | 10/100 Base-T x 1 | 10/100 Base-T x 1 | LAN: 10/100 Base-T x 1 SW1, SW2: 10/100 Base-T x 1 (2 port Ethernet switch) |
| | Wi-Fi | N/A | N/A | IEEE 802.11 b/g/n 802.11b: max 15.88 dBm 802.11g: max 11.92 dBm 802.11n: max 11.28 dBm | N/A | N/A |
| | COM Port | COM1: RS-232 2W COM2: RS-485 2W/4W COM3: RS-485 2W | COM1: RS-232 2W COM2: RS-485 2W/4W COM3: RS-485 2W | COM1: RS-232 2W COM2: RS-485 2W/4W COM3: RS-485 2W | COM1: RS-232 2W, RS-485 2W/4W COM2: RS-232 2W, RS-485 2W/4W | N/A |
| | Local bus | iBus | N/A | N/A | N/A | N/A |
| **CODESYS** | Protocol | Modbus TCP/IP Master | N/A | N/A | N/A | N/A |
| **RTC** | | Built-in | Built-in | Built-in | Built-in | Built-in |
| **Power** | Input Power | 24±20%VDC | 24±20%VDC | 10.5~28VDC | 10.5~28VDC | 10.5~28VDC |
| | Power Isolation | Built-in | Built-in | Built-in | Built-in | Built-in |
| | Power Dissipation | Nominal 310mA @ 24VDC | N/A | N/A | N/A | N/A |
| | Current for Internal Bus | Max 2A @ 5VDC | N/A | N/A | N/A | N/A |
| | Current Consumption | 550mA @ 5VDC | N/A | N/A | N/A | N/A |
| | Power Consumption | N/A | 230mA@24VDC | 230mA@12VDC；115mA@24VDC | 300mA@12VDC；150mA@24VDC | 270mA@12VDC；150mA@24VDC |
| | Voltage Resistance | 500VAC (1 min.) | 500VAC (1 min.) | 500VAC (1 min.) | 500VAC (1 min.) | 500VAC (1 min.) |
| | Isolation Resistance | Exceed 50MΩ @ 500VDC | Exceed 50MΩ @ 500VDC | Exceed 50MΩ @ 500VDC | Exceed 50MΩ @ 500VDC | Exceed 50MΩ @ 500VDC |
| | Vibration Endurance | 10 to 25Hz (X, Y, Z direction 2G 30 minutes) | 10 to 25Hz (X, Y, Z direction 2G 30 minutes) | 10 to 25Hz (X, Y, Z direction 2G 30 minutes) | 10 to 25Hz (X, Y, Z direction 2G 30 minutes) | 10 to 25Hz (X, Y, Z direction 2G 30 minutes) |
| **Specification** | PCB Coating | Yes | Yes | Yes | Yes | Yes |
| | Enclosure | Plastic | Plastic | Plastic | Plastic | Plastic |
| | Dimensions WxHxD | 50 x 109 x 81 mm | 27 x 109 x 81 mm | 27 x 109 x 81 mm | 27 x 109 x 81 mm | 27 x 109 x 81 mm |
| | Weight | Approx. 0.24 kg | Approx. 0.14 kg | Approx. 0.14 kg | Approx. 0.14 kg | Approx. 0.14 kg |
| | Mount | 35 mm DIN rail mounting | 35 mm DIN rail mounting | 35 mm DIN rail mounting | 35 mm DIN rail mounting | 35 mm DIN rail mounting |
| **Environment** | Protection Structure | IP20 | IP20 | IP20 | IP20 | IP20 |
| | Storage Temperature | -20° ~ 70° C (-4° ~ 158° F) | -20° ~ 60° C (-4° ~ 140° F) | -20° ~ 60° C (-4° ~ 140° F) | -20° ~ 60° C (-4° ~ 140° F) | -20° ~ 60° C (-4° ~ 140° F) |
| | Operating Temperature | -10° ~ 50° C (14° ~122° F) | 0° ~ 50° C (32° ~ 122° F) | 0° ~ 50° C (32° ~ 122° F) | 0° ~ 50° C (32° ~ 122° F) | 0° ~ 50° C (32° ~ 122° F) |
| | Relative Humidity | 10% ~ 90% (non-condensing) | 10% ~ 90% (non-condensing) | 10% ~ 90% (non-condensing) | 10% ~ 90% (non-condensing) | 10% ~ 90% (non-condensing) |
| **Certificate** | CE | CE marked | CE marked | CE marked | CE marked | CE marked |
| | UL | | cULus Listed | cULus Listed | cULus Listed | cULus Listed |
| **Software** | | EasyBuilder Pro EasyAccess 2.0 (Optional) Built-in CODESYS | EasyBuilder Pro EasyAccess 2.0 (Optional) | EasyBuilder Pro EasyAccess 2.0 (Optional) | EasyBuilder Pro EasyAccess 2.0 (Optional) | EasyBuilder Pro EasyAccess 2.0 (Optional) |

# Dimensions

| cMT-CTRL01 | cMT-G01 | cMT-G02 | cMT-G03 | cMT-G04 |
|---|---|---|---|---|
| 50mm [1.97"] | 27mm [1.06"] | 27mm [1.06"] | 27mm [1.06"] | 27mm [1.06"] |
| Front View | Front View | Front View | Front View | Front View |
| 81mm [3.19"] / 109mm [4.29"] | 81mm [3.19"] / 109mm [4.29"] | 81mm [3.19"] / 109mm [4.29"] | 81mm [3.19"] / 109mm [4.29"] | 81mm [3.19"] / 109mm [4.29"] |
| Side View | Side View | Side View | Side View | Side View |
| Top View | Top View | Top View | Top View | Top View |
| Bottom View | Bottom View | Bottom View | Bottom View | Bottom View |

# Specification

| Model | | cMT-SVR-100 | cMT-SVR-102 | cMT-SVR-200 | cMT-SVR-202 | cMT-FHD | cMT-iM21 |
|---|---|---|---|---|---|---|---|
| **Display** | Display | N/A | | N/A | | N/A | 21.5" IPS |
| | Resolution | N/A | | N/A | | N/A | Full HD 1920 x 1080 |
| | Brightness (cd/ m² ) | N/A | | N/A | | N/A | 250 |
| | Contrast Ratio | N/A | | N/A | | N/A | 1000: 1 |
| | Backlight Type | N/A | | N/A | | N/A | LED |
| | Backlight Life Time | N/A | | N/A | | N/A | >50,000 hrs. |
| | Colors | N/A | | N/A | | N/A | 16.7M |
| | LCD Viewing Angle (T/B/L/R) | N/A | | N/A | | N/A | 89/89/89/89 |
| | Pixel Pitch (mm) | N/A | | N/A | | N/A | 0.2479 (H) x 0.2479 (V) |
| **Touch Panel** | Type | N/A | | N/A | | N/A | Tempered Glass, Capacitive Type ( Supports 2-Finger Gestures ) Hardness Scale 6H |
| **Memory** | Flash | 256 MB | | 256 MB | | 4 GB | N/A |
| | RAM | 256 MB | | 256 MB | | 1 GB | N/A |
| **Processor** | | 32-bit RISC 600MHz | | 32-bit RISC 600MHz | | 32-bit RISC 1GHz (Two 2D Graphics Engine) | N/A |
| **I/O Port** | SD Card Slot | SD/SDHC | | SD/SDHC | | N/A | N/A |
| | USB Host | USB 2.0 x 1 | | USB 2.0 x 1 | | USB 2.0 x 1 | USB 2.0 x 1 |
| | USB Client | N/A | | N/A | | N/A | USB 2.0 x 1 (Micro USB) |
| | Ethernet | 10/100/1000 Base-T x 2 | | 10/100/1000 Base-T x 1 | | LAN 1: 10/100/1000 Base-T x 1 LAN 2: 10/100 Base-T x 1 | N/A |
| | Wi-Fi | N/A | | IEEE 802.11 b/g/n 802.11b: max 18.01 dBm 802.11g: max 11.02 dBm 802.11n: max 12.20 dBm | | N/A | N/A |
| | COM Port | COM1: RS-232 COM2: RS-485 2W/4W COM3: RS-485 2W | | COM1: RS-232 COM2: RS-485 2W/4W COM3: RS-485 2W | | COM1: RS-232 COM2: RS-485 2W/4W COM3: RS-485 2W | N/A |
| | HDMI | N/A | | N/A | | Resolution 1920 x 1080 (customizable) | Yes ( Video Input ) |
| | Audio Output | N/A | | N/A | | HDMI Audio Output | N/A |
| **RTC** | | Built-in | | Built-in | | Built-in | N/A |
| **Power** | Input Power | 24±20%VDC | | 10.5~28VDC | | 10.5~28VDC | 24±20%VDC |
| | Power Isolation | Built-in | | Built-in | | Built-in | Built-in |
| | Power Consumption | 230mA@24VDC | | 1000mA@12VDC ; 450mA@24VDC | | 1250mA@12VDC ; 550mA@24VDC | 1.56A@24VDC |
| | Voltage Resistance | 500VAC (1 min.) | | 500VAC (1 min.) | | 500VAC (1 min.) | 500VAC (1 min.) |
| | Isolation Resistance | Exceed 50MΩ @ 500VDC | | Exceed 50MΩ @ 500VDC | | Exceed 50MΩ @ 500VDC | Exceed 50MΩ @ 500VDC |
| | Vibration Endurance | 10 to 25Hz (X, Y, Z direction 2G 30 minutes) | | 10 to 25Hz (X, Y, Z direction 2G 30 minutes) | | 10 to 25Hz (X, Y, Z direction 2G 30 minutes) | 10 to 25Hz (X, Y, Z direction 2G 30 minutes) |
| **Specification** | PCB Coating | Yes | | Yes | | Yes | Yes |
| | Enclosure | Plastic | | Plastic | | Plastic | Aluminum |
| | Dimensions WxHxD | 27 x 130 x 115 mm | | 27 x 130 x 115 mm | | 29.8 x 130 x 115 mm | 546 x 354 x 56.2 mm |
| | Panel Cutout | N/A | | N/A | | N/A | 532 x 340 mm |
| | Weight | Approx. 0.18 kg | | Approx. 0.18 kg | | Approx. 0.24 kg | Approx. 4.9 kg |
| | Mount | 35 mm DIN rail mounting | | 35 mm DIN rail mounting | | 35 mm DIN rail mounting | Panel mount, VESA mount 100 x 100 mm |
| **Environment** | Protection Structure | IP20 | | IP20 | | IP20 | NEMA4 / IP65 Compliant Front Panel* |
| | Storage Temperature | -20° ~ 70° C (-4° ~ 158° F) | | -20° ~ 70° C (-4° ~ 158° F) | | -20° ~ 60° C (-4° ~ 140° F) | -20° ~ 60° C (-4° ~ 140° F) |
| | Operating Temperature | -20° ~ 55° C (-4° ~ 131° F) | | -10° ~ 55° C (14° ~ 131° F) | | 0° ~ 50° C (32° ~ 122° F) | 0° ~ 50° C (32° ~ 122° F) |
| | Relative Humidity | 10% ~ 90% (non-condensing) | | 10% ~ 90% (non-condensing) | | 10% ~ 90% (non-condensing) | 10% ~ 90% (non-condensing) |
| **Certificate** | CE | CE marked | | CE marked | | CE marked | CE marked |
| | UL | cULus Listed | | cULus Listed | | cULus Listed | cULus Listed |
| **Software** | | EasyBuilder Pro EasyAccess 2.0 (Optional) | EasyBuilder Pro Built-in EasyAccess 2.0 | EasyBuilder Pro EasyAccess 2.0 (Optional) | EasyBuilder Pro Built-in EasyAccess 2.0 | EasyBuilder Pro EasyAccess 2.0 (Optional) | N/A |

*cMT-iM21: Protection Structure IP65 can be expected when waterproof gasket is properly installed.

# Dimensions

| cMT-SVR100 / cMT-SVR102 | cMT-SVR-200 / cMT-SVR-202 | cMT-FHD | cMT-iM21 |
|---|---|---|---|
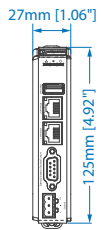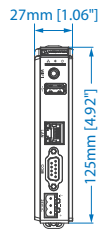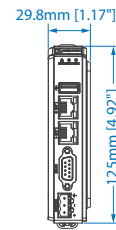
27mm [1.06"]
125mm [4.92"]

**Front View**

27mm [1.06"]
125mm [4.92"]

**Front View**

29.8mm [1.17"]
125mm [4.92"]

**Front View**

546mm [21.50"]
354mm [13.94"]

**Front View**

---

115mm [4.52"]
130mm [5.11"]

**Side View**

115mm [4.52"]
130mm [5.11"]

**Side View**

115mm [4.52"]
130mm [5.11"]

**Side View**

530mm [20.87"]
338mm [13.31"]
100mm [3.94"]
100mm [3.94"]

**Rear View**

---

**Top View**

**Top View**

**Top View**

56.2mm [2.21"]
46mm [1.81"]
29.2mm [1.15"]

Panel-mounting
clamp slots, 16 places

**Bottom View**

---

**Bottom View**

**Bottom View**

**Bottom View**

532mm [20.94"]
340mm [13.39"]

cMT-iM21 :
532mm [20.94"] W x 340mm [13.39"] H
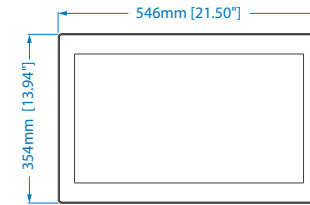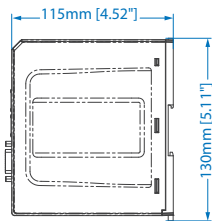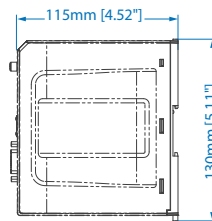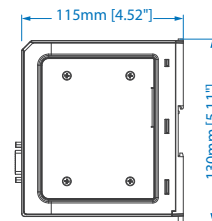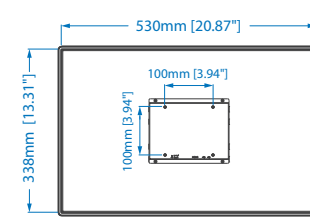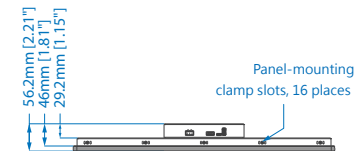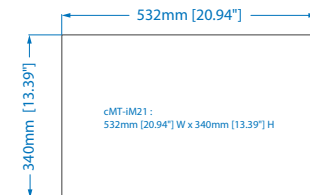
**Cutout Dimensions**

# Specification

| | Model | cMT-iV6 | cMT-iPC10 | cMT-iPC15 |
|---|---|---|---|---|
| **Display** | Display | 9.7" TFT | 9.7" TFT | 15" IPS |
| | Resolution | 1024 x 768 | 1024 x 768 | 1024 x 768 |
| | Brightness (cd/ m²) | 350 | 350 | 400 |
| | Contrast Ratio | 500: 1 | 500: 1 | 1000: 1 |
| | Backlight Type | LED | LED | LED |
| | Backlight Life Time | >30,000 hrs. | >30,000 hrs. | >50,000 hrs. |
| | Colors | 262K | 262K | 16.2M |
| | LCD Viewing Angle (T/B/L/R) | 60/70/70/70 | 60/70/70/70 | 89/89/89/89 |
| | Pixel Pitch (mm) | 0.192 (H) x 0.192 (V) | N/A | 0.297(H) x 0.297(V) |
| **Touch Panel** | Type | 4-wire Resistive Type | 4-wire Resistive Type | 4-wire Resistive Type |
| | Accuracy | Active Area Length(X)±2%, Width(Y)±2% | Active Area Length(X)±2%, Width(Y)±2% | Active Area Length(X)±2%, Width(Y)±2% |
| **Memory** | Flash | 4 GB | 64 GB (SSD) | 64 GB (SSD) |
| | RAM | 1 GB | 4 GB | 4 GB |
| **Processor** | | 32-bit RISC 1GHz | Intel Atom® E3827 processor | Intel Atom® E3827 processor |
| **I/O Port** | SD Card Slot | SD/SDHC | SD/SDHC/SDXC | SD/SDHC/SDXC |
| | USB Host | N/A | USB 2.0 x 2 / USB 3.0 x 1 | USB 2.0 x 2 / USB 3.0 x 1 |
| | USB Client | N/A | N/A | N/A |
| | Ethernet | 10/100/1000 Base-T x 1 | 10/100/1000 Base-T x 2 | 10/100/1000 Base-T x 2 |
| | Audio Output | Built-in Mono Speaker | Built-in Mono Speaker Audio Line Out - 3.5 mm jack x 1 | Built-in Mono Speaker Audio Line Out - 3.5 mm jack x 1 |
| **RTC** | | Built-in | Built-in | Built-in |
| **Power** | Input Power | 24±20%VDC | 24±20%VDC | 24±20%VDC |
| | Power Isolation | Built-in | Built-in | Built-in |
| | Power Consumption | 900mA@24VDC | 1.5A@24VDC | 2A@24VDC |
| | Voltage Resistance | 500VAC (1 min.) | 500VAC (1 min.) | 500VAC (1 min.) |
| | Isolation Resistance | Exceed 50MΩ @ 500VDC | Exceed 50MΩ @ 500VDC | Exceed 50MΩ @ 500VDC |
| | Vibration Endurance | 10 to 25Hz (X, Y, Z direction 2G 30 minutes) | 10 to 25Hz (X, Y, Z direction 2G 30 minutes) | 10 to 25Hz (X, Y, Z direction 2G 30 minutes) |
| **Specification** | PCB Coating | Yes | Yes | Yes |
| | Enclosure | Plastic | Plastic | Aluminum |
| | Dimensions WxHxD | 260.6 x 203.1 x 36.5 mm | 260.6 x 203.1 x 44.5 mm | 366 x 293 x 54.2 mm |
| | Panel Cutout | 250 x 192 mm | 250 x 192 mm | 352 x 279 mm |
| | Weight | Approx. 0.92 kg | Approx. 1.1 kg | Approx. 2.76 kg |
| | Mount | Panel mount, VESA mount 75 x 75 mm | Panel mount, VESA mount 75 x 75 mm | Panel mount, VESA mount 75 x 75 mm |
| **Environment** | Protection Structure | NEMA4 / IP65 Compliant Front Panel | UL Type 4X (indoor use only) / NEMA4 / IP65 Compliant Front Panel | UL Type 4X (indoor use only) / NEMA4 / IP65 Compliant Front Panel |
| | Storage Temperature | -20° ~ 60° C (-4° ~ 140° F) | -20° ~ 60° C (-4° ~ 140° F) | -20° ~ 70° C (-4° ~ 158° F) |
| | Operating Temperature | 0° ~ 50° C (32° ~ 122° F) | 0° ~ 50° C (32° ~ 122° F) | 0° ~ 50° C (32° ~ 122° F) |
| | Relative Humidity | 10% ~ 90% (non-condensing) | 10% ~ 90% (non-condensing) | 10% ~ 90% (non-condensing) |
| **Certificate** | CE | CE marked | CE marked | CE marked |
| | UL | | cULus Listed | cULus Listed |
| **Software** | | cMT Viewer | *Windows® 7 / Windows® 8.1 / Windows® 10 IoT Enterprise (EasyLauncher + cMT Viewer) | *Windows® 7 / Windows® 8.1 / Windows® 10 IoT Enterprise (EasyLauncher + cMT Viewer) |

* cMT-iPC10/ cMT-iPC15: License of Windows OS is excluded.
* Intel Atom is a trademark of Intel Corporation or its subsidiaries in the U.S. and/or other countries.

# Dimensions

| cMT-iV6 | cMT-iPC10 | cMT-iPC15 |
|---|---|---|
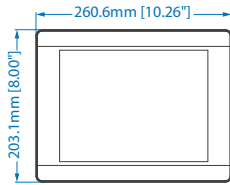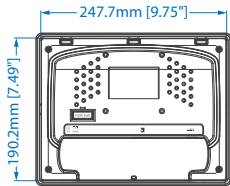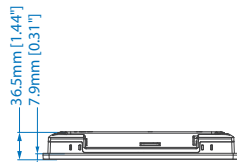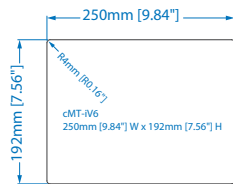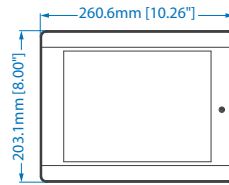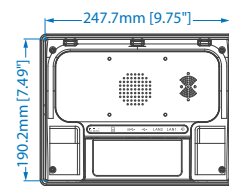
**cMT-iV6**

260.6mm [10.26"]

203.1mm [8.00"]

Front View

247.7mm [9.75"]

190.2mm [7.49"]

Rear View

36.5mm [1.44"]
7.9mm [0.31"]

Bottom View

250mm [9.84"]

192mm [7.56"]

R4mm [R0.16"]

cMT-iV6
250mm [9.84"] W x 192mm [7.56"] H

Cutout Dimensions

**cMT-iPC10**

260.6mm [10.26"]

203.1mm [8.00"]

Front View

247.7mm [9.75"]

190.2mm [7.49"]

Rear View

44.5mm [1.75"]
7.9mm [0.31"]

Bottom View

250mm [9.84"]

192mm [7.56"]

R4mm [R0.16"]

cMT-iPC10
250mm [9.84"] W x 192mm [7.56"] H

Cutout Dimensions

**cMT-iPC15**

366mm [14.41"]

293mm [11.54"]

Front View

350mm [13.78"]

277mm [10.91"]

Rear View

54.2mm [2.13"]
24.2mm [0.95"]
5.7mm [0.22"]

Panel-mounting
clamp slots, 10 places

Bottom View

352mm [13.86"]

279mm [10.98"]
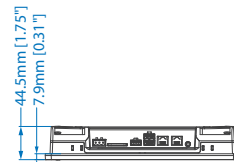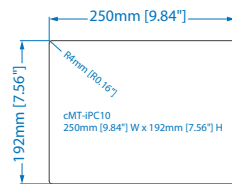
cMT-iPC15 :
352mm [13.86"] W x 279mm [10.98"] H
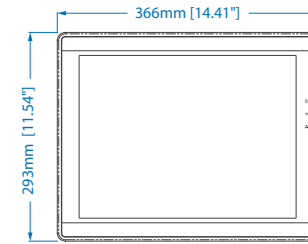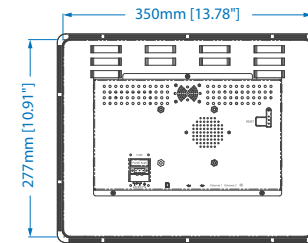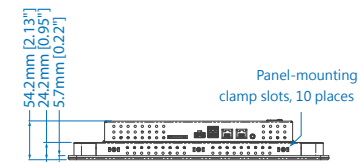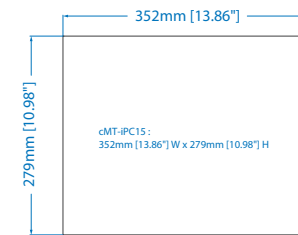
Cutout Dimensions

# iR Series

## Communication Interface Specifications

| Model | | iR-ETN | iR-COP | iR-ECAT |
|---|---|---|---|---|
| **Expansion I/O module** | Number of Bus Terminals | Depends on Power Consumption | Depends on Power Consumption | Depends on Power Consumption |
| | Digital Input Point | Max. 256 | Max. 256 | Max. 256 |
| | Digital Output Point | Max. 128 | Max. 128 | Max. 128 |
| | Analog Input Channel | Max. 64 | Max. 64 | Max. 64 |
| | Analog Output Channel | Max. 64 | Max. 64 | Max. 64 |
| **Data Transfer Rate** | | 10/100 Mbps | 50k~1 Mbps | 100 Mbps |
| **Max. Number of TCP/IP Connections** | | 8 Connections | - | - |
| **Protocol** | | Modbus TCP/IP Server | CANopen Slave | EtherCat® Slave |
| **Power** | Power Supply | 24 VDC (-15%/+20%) | 24 VDC (-15%/+20%) | 24 VDC (-15%/+20%) |
| | Power Dissipation | Nominal 100mA@24VDC | Nominal 100mA@24VDC | Nominal 100mA @ 24VDC |
| | Current for Internal Bus | Max 2A@5VDC | Max 2A@5VDC | Max 2A@5VDC |
| | Current Consumption | 220mA@5VDC | 170mA@5VDC | 270mA@5VDC |
| | Electrical Isolation | Network to Logic : Isolation<br>Logic to Field power : Isolation | Network to Logic : Isolation<br>Logic to Field power : Isolation | Network to Logic : Isolation<br>Logic to Field power : Isolation |
| | Back-up Fuse | ≤ 1.6A Self-recovery | ≤ 1.6A Self-recovery | ≤ 1.6A Self-recovery |
| **Specification** | PCB Coating | Yes | Yes | Yes |
| | Enclosure | Plastic | Plastic | Plastic |
| | Dimensions WxHxD | 27 x 109 x 81 mm | 27 x 109 x 81 mm | 27 x 109 x 81 mm |
| | Weight | Approx. 0.15 kg | Approx. 0.15 kg | Approx. 0.15 kg |
| | Mount | 35mm DIN rail mounting | 35mm DIN rail mounting | 35mm DIN rail mounting |
| **Environment** | Protection Structure | IP20 | IP20 | IP20 |
| | Storage Temperature | -20° ~ 70° C (-4° ~ 158° F) | -20° ~ 70° C (-4° ~ 158° F) | -20° ~ 70° C (-4° ~ 158° F) |
| | Operating Temperature | 0° ~ 55° C (32° ~ 131° F) | 0° ~ 55° C (32° ~ 131° F) | 0° ~ 55° C (32° ~ 131° F) |
| | Relative Humidity | 10% ~ 90% (non-condensing) | 10% ~ 90% (non-condensing) | 10% ~ 90% (non-condensing) |
| **Certification** | EMC Immunity | Conforms to<br>EN 55032: 2012+AC: 2013, Class A<br>EN 61000-6-4: 2007+A1:2011<br>EN 55024: 2010+A1: 2015<br>EN 61000-6-2:2005 | Conforms to<br>EN 55032: 2012+AC: 2013, Class A<br>EN 61000-6-4: 2007+A1:2011<br>EN 55024: 2010+A1: 2015<br>EN 61000-6-2:2005 | Conforms to<br>EN 55032: 2012+AC: 2013, Class A<br>EN 61000-6-4: 2007+A1:2011<br>EN 55024: 2010+A1: 2015<br>EN 61000-6-2:2005 |

# Digital Input/Output Specifications

| Model | iR-DI16-K | iR-DM16-P | iR-DM16-N | iR-DQ16-P | iR-DQ16-N | iR-DQ08-R |
|---|---|---|---|---|---|---|
| Input Logic | Sink or Source | Sink or Source | Sink or Source | N/A | N/A | N/A |
| Number of Inputs | 16 | 8 | 8 | 0 | 0 | 0 |
| Output Logic | N/A | Source | Sink | Source | Sink | Relay |
| Number of Outputs | 0 | 8 | 8 | 16 | 16 | 8 |
| Current Consumption | 83mA@5VDC | 130mA@5VDC | 130mA@5VDC | 196mA@5VDC | 205mA@5VDC | 220mA@5VDC |
| HIGH Level Input Voltage | 15~28VDC | 15~28VDC | 15~28VDC | N/A | N/A | N/A |
| LOW Level Input Voltage | 0~5 VDC | 0~5 VDC | 0~5 VDC | N/A | N/A | N/A |
| Output Voltage | N/A | 11~28VDC | 11~28VDC | 11~28VDC | 11~28VDC | 250VAC/ 30VDC |
| Output Current | N/A | 0.5A per channel (Max 4A) | 0.5A per channel (Max 4A) | 0.5A per channel (Max 4A) | 0.5A per channel (Max 4A) | 2A per channel (Max 8A) |

| Specification | | | |
|---|---|---|---|
| | Enclosure | Plastic | |
| | Dimensions WxHxD | 27 x 109 x 81 mm | |
| | Weight | Approx. 0.12 kg | Approx. 0.13 kg |
| | Mount | 35mm DIN rail mounting | |
| Environment | Protection Structure | IP20 | |
| | Storage Temperature | -20° ~ 70° C (-4° ~ 158° F) | |
| | Operating Temperature | 0° ~ 55° C (32° ~ 131° F) | |
| | Relative Humidity | 10% ~ 90% (non-condensing) | |
| Connection | Cross-section | AWG 28-16 | AWG 24-16 |
| Certification | EMC Immunity | Conforms to EN 55032: 2012+AC: 2013, Class A; EN 61000-6-4: 2007+A1:2011; EN 55024: 2010+A1: 2015; EN 61000-6-2:2005 | |

# Analog Input/Output Specifications

| Model | iR-AI04-VI | iR-AM06-VI | iR-AQ04-VI |
|---|---|---|---|
| Number of Analog Inputs | 4 (±10V/ ±20mA) | 4 (±10V/ ±20mA) | 0 |
| Number of Analog outputs | 0 | 2 (±10V/ ±20mA) | 4 (±10V/ ±20mA) |
| Current Consumption | 70mA@5VDC | 70mA@5VDC | 65mA@5VDC |
| Analog Power Supply | 24 VDC(20.4 VDC~28.8 VDC) (-15%~+20%) | 24 VDC(20.4 VDC~28.8 VDC) (-15%~+20%) | 24 VDC(20.4 VDC~28.8 VDC) (-15%~+20%) |

| Specification | | | |
|---|---|---|---|
| | PCB Coating | Yes | |
| | Enclosure | Plastic | |
| | Dimensions WxHxD | 27 x 109 x 81 mm | |
| | Weight | Approx. 0.12 kg | |
| | Mount | 35mm DIN rail mounting | |
| Environment | Protection Structure | IP20 | |
| | Storage Temperature | -20° ~ 70° C (-4° ~ 158° F) | |
| | Operating Temperature | 0° ~ 55° C (32° ~ 131° F) | |
| | Relative Humidity | 10% ~ 90% (non-condensing) | |
| Connection | Cross-section | AWG 28-16 | AWG 24-16 |
| Certification | EMC Immunity | Conforms to EN 55032: 2012+AC: 2013, Class A; EN 61000-6-4: 2007+A1:2011; EN 55024: 2010+A1: 2015; EN 61000-6-2:2005 | |

# Temperature Specifications

| Model | iR-AI04-TR |
|---|---|
| Number of Input Channels | 4 (RTD/ Thermocouple) |
| Current Consumption | 65mA@5VDC |
| Analog Power Supply | 24 VDC(20.4 VDC~28.8 VDC) (-15%~+20%) |

| Specification | | |
|---|---|---|
| | PCB Coating | Yes |
| | Enclosure | Plastic |
| | Dimensions WxHxD | 27 x 109 x 81 mm |
| | Weight | Approx. 0.12 kg |
| Environment | Mount | 35mm DIN rail mounting |
| | Protection Structure | IP20 |
| | Storage Temperature | -20° ~ 70° C (-4° ~ 158° F) |
| | Operating Temperature | 0° ~ 55° C (32° ~ 131° F) |
| | Relative Humidity | 10% ~ 90% (non-condensing) |
| Connection | Cross-section | AWG 28-16 |
| Certification | EMC Immunity | Conforms to EN 55032: 2012+AC: 2013, Class A; EN 61000-6-4: 2007+A1:2011; EN 55024: 2010+A1: 2015; EN 61000-6-2:2005 |

# Motion Control Specifications

| Model | iR-PU01-P | |
|---|---|---|
| | Digital input/ output | Differential input/ output |
| Input Logic | Sink Input | Differential Input |
| Number of Inputs | 4 | 3 (A/B/Z phase ) |
| Output Logic | Source Output | Differential Output |
| Number of Outputs | 4 | 2(A/B phase ) |
| HIGH Level Input Voltage | 15~28 VDC | - |
| LOW Level Input Voltage | 0~5 VDC | - |
| Input current | 24 VDC, 5 mA | Meets the Requirements of ANSI  Standards TIA/EIA-485-A |
| Input Impedance | 3 KΩ | - |
| System Indicators | Red LED Input State | |
| Output Voltage | 24VDC | Meets the Requirements of ANSI  Standards TIA/EIA-485-A |
| Output Current | 50 mA | |
| Maximum input frequency | 200KHz | 2MHz |
| Maximum Output frequency | 40KHz | 2MHz |

| Number of Axis | | 1- Axis |
|---|---|---|
| Specification | PCB Coating | Yes |
| | Enclosure | Plastic |
| | Dimensions WxHxD | 27 x 109 x 81 mm |
| | Weight | Approx. 0.12 kg |
| | Mount | 35mm DIN rail mounting |
| Environment | Protection Structure | IP20 |
| | Storage Temperature | -20° ~ 70° C (-4° ~ 158° F) |
| | Operating Temperature | 0° ~ 55° C (32° ~ 131° F) |
| | Relative Humidity | 10% ~ 90% (non-condensing) |
| Connection | Cross-section | AWG 28-16 |
| Certification | EMC Immunity | Conforms to EN 55032: 2012+AC: 2013, Class A; EN 61000-6-4: 2007+A1:2011; EN 55024: 2010+A1: 2015; EN 61000-6-2:2005 |

# Quick Feature Comparison

| | cMT3092X | cMT3152X | cMT3162X | cMT3071 | cMT3072 | cMT3103 | cMT-CTRL01 | Gateway<br>cMT-G01 / cMT-G02<br>cMT-G03 / cMT-G04 | cMT-FHD | cMT-SVR-100 | cMT-SVR-200 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Audio Output | ● | ● | ● | | | | | | via HDMI | | |
| Wi-Fi | | | | | | ● | | cMT-G02 | | | ● |
| cMT Viewer | ● | ● | ● | ● | ● | ● | | | ● | ● | ● |
| 3G/4G Dongle | ● | ● | ● | ● | ● | ● | | | | ● | ● |
| Control Token | ● | ● | ● | ● | ● | ● | | | ● | ● | ● |
| e-Mail | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| Ethernet Printer | ● | ● | ● | ● | ● | ● | | | ● | | |
| VNC Server | ● | ● | ● | ● | ● | ● | | | ● | | |
| Web Streaming | ● | ● | ● | ● | ● | ● | | | ● | ● | ● |
| Window Animation | ● | ● | ● | ● | ● | ● | | | ● | ● | ● |
| Combo Object | ● | ● | ● | ● | ● | ● | | | ● | ● | ● |
| File Browser | ● | ● | ● | ● | ● | ● | | | ● | | |
| Media Player | ● | ● | ● | ● | ● | ● | | | ● | | |
| PDF Reader | ● | ● | ● | ● | ● | ● | | | ● | | |
| Operation Log | ● | ● | ● | ● | ● | ● | | | ● | ● | ● |
| Picture Viewer | ● | ● | ● | ● | ● | ● | | | ● | | |
| Video In - IP Camera | ● | ● | ● | ● | ● | ● | | | ● | | |
| Energy Demand Display | ● | ● | ● | ● | ● | ● | | | ● | ● | ● |
| MQTT | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| OPC UA Client | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| OPC UA Server | ● | ● | ● | ● | ● | ● | ● | ● | Optional | Optional | Optional |
| Database Server | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| SQL Query | ● | ● | ● | ● | ● | ● | | | ● | ● | ● |
| CODESYS | Optional | Optional | Optional | Optional | Optional | | ● | | | | |
| EasyAccess 2.0 | Built-in License | Built-in License | Built-in License | Optional | Built-in License | Built-in License | Optional | Optional | Optional | cMT-SVR-100 Optional<br>cMT-SVR-102 Built-in License | cMT-SVR-200 Optional<br>cMT-SVR-202 Built-in License |

# WEINTEK

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## Weintek

Since the foundation  of the company in October of 1995, Weintek Labs., Inc. has been committing itself to being a leading-edge designer and manufacturer of graphic operator interfaces, also known as HMI (Human Machine Interfaces), in Taiwan. We took our rich experience as HMI specialists and set the HMI product standard with state-of-the-art technology, efficient manufacturing, conscientious and careful testing, and global specialized support.

The company's missions are to provide its customers with quality products and superior service as well as to share the fruits of its good teamwork with all of its employees, by which we are able to achieve the goals of establishing a reputation as a leading brand in the industry and ensuring sustainability of the operation and development of enterprise.

RoHS  ISO 9001:2015       EN / 2020.02