WE!NTEK

Industry 4.0
IIoT Platform

cMT Series

Edge Computing & Smart Manufacturing
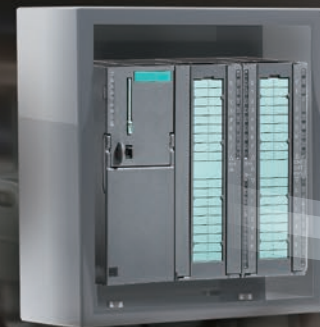
1

cMT X Series
IIoT Edge Computing

A major HMI upgrade that not only retains features of the predecessors but also integrates OT with the IIoT.

Features

▶ Built-in OPC UA Client / Server, certified by the OPC foundation.

▶ Modbus TCP/IP facilitates seamless integration with field devices.

▶ MQTT protocol, providing standard implementation as well as easy Cloud IoT tool integration with AWS IoT, Microsoft Azure, and Google Cloud.

▶ Database feature supports MySQL and MS SQL systems, making applications like centralized recipe management or ERP integration feasible.

HMI

▶ Retains all key features of the predecessors.

▶ Supports more than 300 major PLC drivers. / Excellent computation and communication capability.

▶ EasyAccess 2.0 provides remote HMI Management and pass-through capacities.

▶ Revamped Web interface allows for HMI screen access and log viewing with only a web browser, plus enhanced security with encrypted data transmission.

▶ The enhanced CPU/GPU power of the quad-core processor ensures smooth operation of HMI project without delay, even with CODESYS running at the same time.

▶ HMI Program+PLC communication and CODESYS+ I/O module control runs on independent cores of the multi-core CPU, a cutting-edge proprietary technology.

IIoT Platform

MQTT
OPC UA
Modbus

300+ Protocols Supported

Supports Modbus, CANopen, EtherNet/IP and EtherCAT

PLC

Remote I/O

Touch Gesture

cMT3162X supports up to 25 touch gestures to make operating HMI as easy as using a smartphone.

CODESYS

▶ CODESYS runs on an independent core (Optional).

▶ Supports Modbus, CANopen, EtherNet/IP and EtherCAT.

▶ Supports applications using I/O modules.

▶ cMT2166X / cMT3162X supports user-configurable touch gesture feature with its IPS, capacitive type multi-touch screen.

▶ cMT3162X supports vibration feedback for event alerts and touch operation.

2

Gateway Series
IIoT Edge Gateway

Outstanding data processing and communication ability facilitate integration of different brands of PLCs with protocol standards like OPC UA / MQTT / Modbus TCP/IP.

Features

▶ Specializing in communication and data processing, cMT G Series can communicate with over 300 major PLC drivers and then transmit that data to IIoT platforms using the most popular IIoT protocols: OPC UA, MQTT and Modbus TCP/IP.

▶ Supports data log and event log synchronization to MySQL, MS SQL database servers.

▶ Built-in Web interface enables the use of web browser for tasks such as system settings, PLC communication parameter settings, OPC UA tag configuration, etc.

▶ The box shaped and 35mm DIN rail mountable design makes the model an easy fit in diverse settings.

MC Protocol

IEC 104

300+ Protocols Supported

DF1   S7-1200   MPI
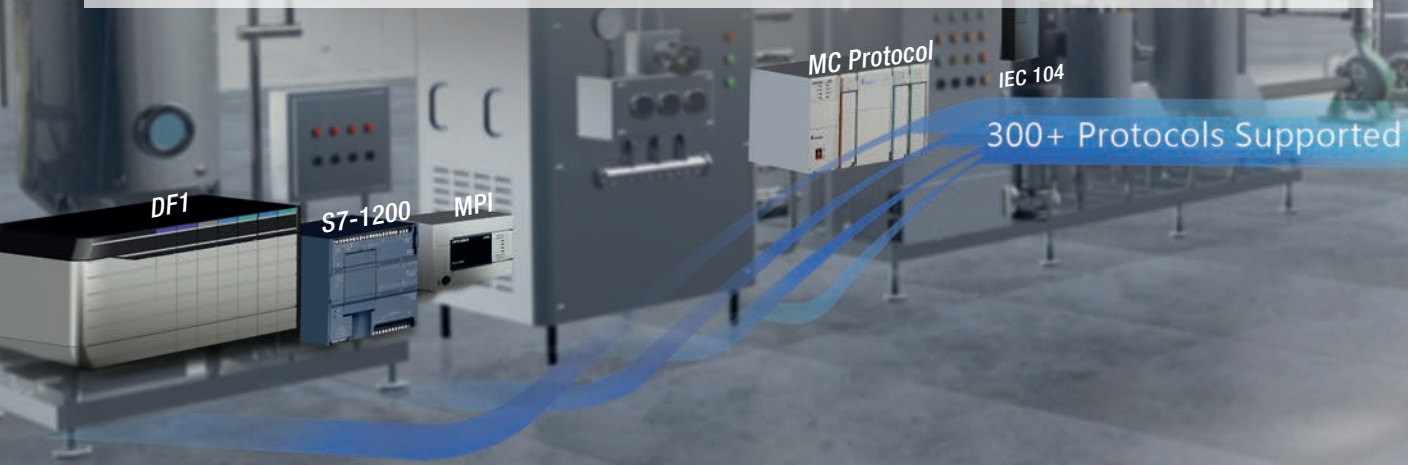
Modbus

MODBUS (TCP/IP) is a simple and common communication protocol used in industrial automation application.

MQTT

MQTT, an built-in IoT protocol standard, features lightweight message transport and publish/subscribe mechanism.
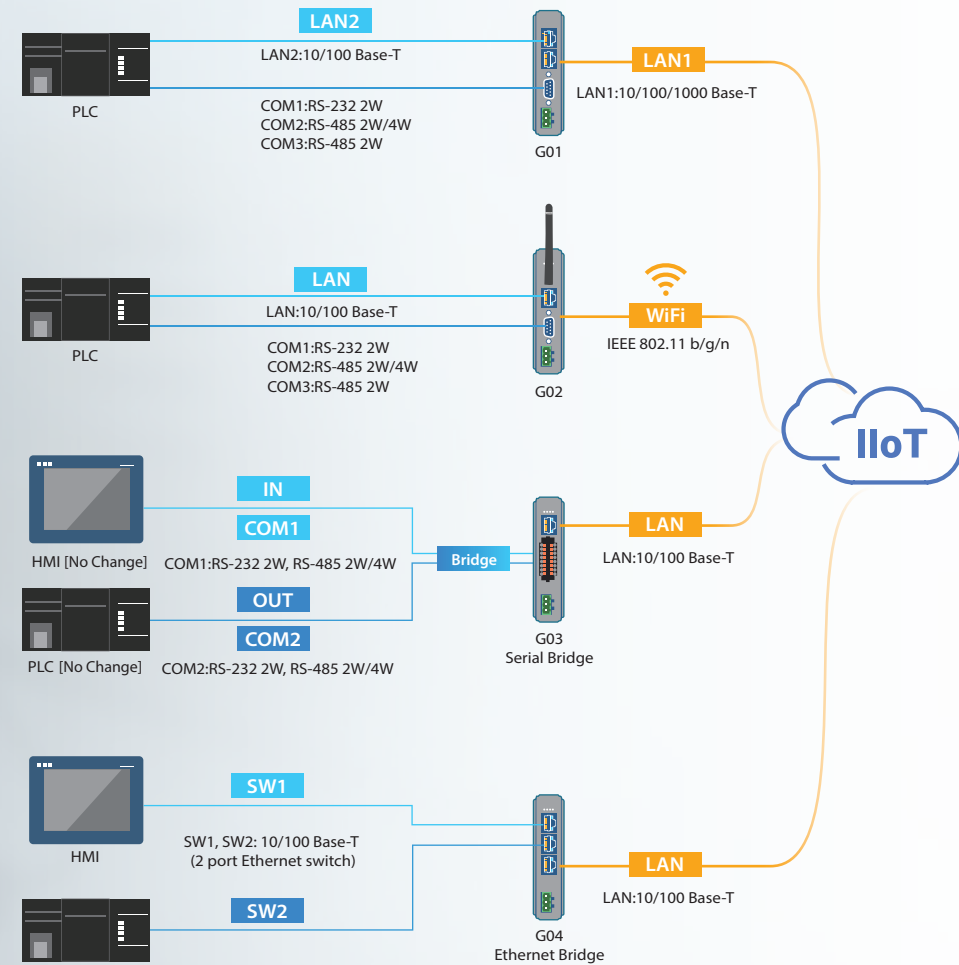
3 Major Industrial Communication Protocols

OPC UA

CERTIFIED

The built-in OPC UA is officially certified for compliance by the OPC Foundation. OPC UA is the key industrial communication protocol that is secure, open-source, and platform-dependent.

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

The Easier Bridge to IIoT

PLC

LAN2
LAN2:10/100 Base-T
COM1:RS-232 2W
COM2:RS-485 2W/4W
COM3:RS-485 2W
G01

LAN1
LAN1:10/100/1000 Base-T

PLC

LAN
LAN:10/100 Base-T
COM1:RS-232 2W
COM2:RS-485 2W/4W
COM3:RS-485 2W
G02

WiFi
IEEE 802.11 b/g/n

HMI [No Change]

IN
COM1
COM1:RS-232 2W, RS-485 2W/4W

PLC [No Change]

OUT
COM2
COM2:RS-232 2W, RS-485 2W/4W

Bridge

LAN
LAN:10/100 Base-T

G03
Serial Bridge

HMI

SW1
SW1, SW2: 10/100 Base-T
(2 port Ethernet switch)
SW2

LAN
LAN:10/100 Base-T

PLC

G04
Ethernet Bridge

IIoT

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

Heater Portion Valve

SV 41.19 °C
PV 41.12 °C

IIoT
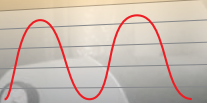
EasyBuilder Pro | CODESYS

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

iR Series
▶ Communication couplers: Modbus TCP/IP, CANopen, EtherNet/IP™, and EtherCAT.
▶ iR-PU01-P Motion Control Module.
▶ iR Digital / Analog IO Modules.
▶ iR-AI04-TR Temperature Module.

EtherCAT™

* CODESYS® is a trademark of 3S-Smart Software Solutions GmbH.
* EtherNet/IP is a trademark of ODVA, Inc.
* EtherCAT® is a registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany

▶ Dual Ethernet ports and RS-232/485 serial ports with communication support more than 300 major PLC drivers.
▶ In compliance 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 supports the protocols used by over 300 major PLC drivers.
▶ OPC UA and MQTT, being widely accepted standards, enable data upload from on-site devices to IIoT datacenter.
▶ Supports synchronization of sampled data and event log to SQL database.

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

Features
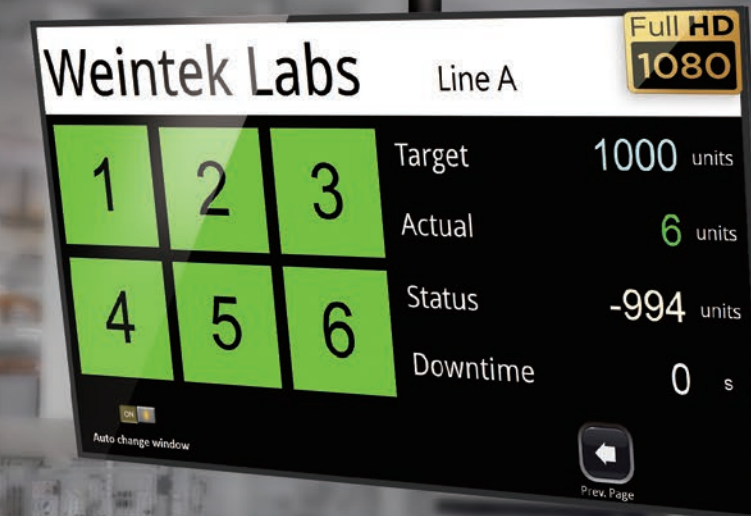
HDMI™
HIGH-DEFINITION MULTIMEDIA INTERFACE

▶ Built-in HDMI interface and adjustable resolution up to 1920x1080
▶ Supports customized resolution for 16:9 / 4:3 LCD monitor
▶ Support IIoT Protocol: MQTT

Weintek Labs   Line A   Full HD 1080

| 1 | 2 | 3 | Target | 1000 units |
| 4 | 5 | 6 | Actual | 6 units |

Status   -994 units
Downtime   0 s

Auto change window

Prev. Page

cMT-FHDX-820

*The terms HDMI, HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.

cMT-FHDX-820 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

cMT Viewer

The cMT-SVR makes it possible to monitor onsite devices on any device that runs the cMT Viewer app (e.g. phone, tablet, or computer), allowing one to walk around freely even while monitoring.

cMT-SVRX / 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.
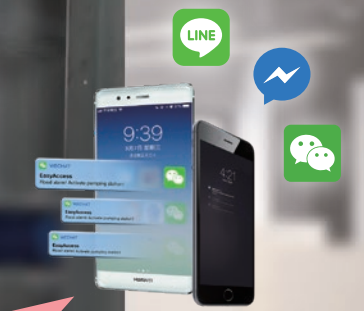
6 EasyAccess 2.0

« Factory   Office »

Pipe temp 200°C

Alarm
Alarm
Alarm
Alarm

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

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.

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.

8 Cloud Data Centering
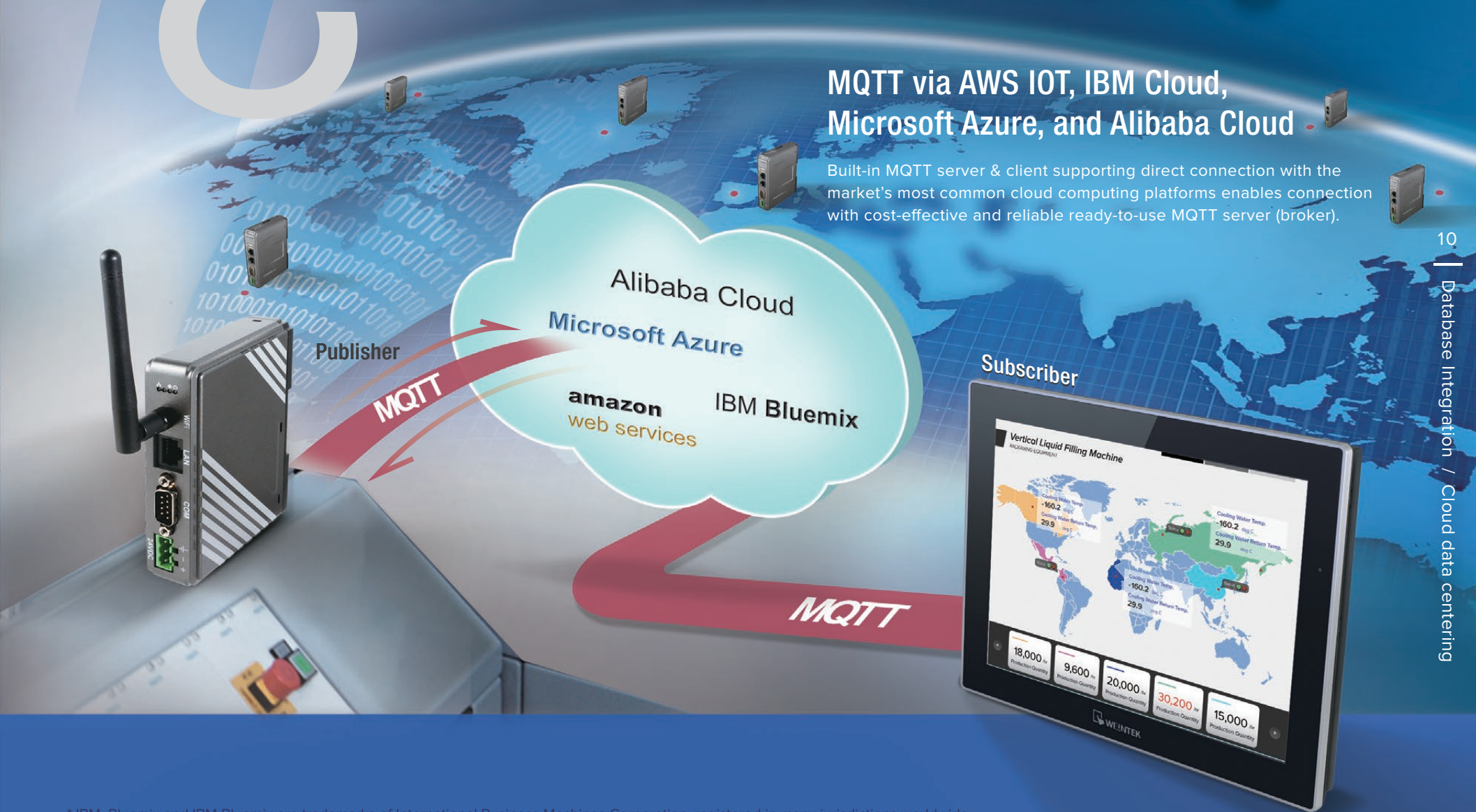
MQTT via AWS IOT, IBM Cloud, Microsoft Azure, and Alibaba Cloud

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).

Publisher

MQTT

Alibaba Cloud

Microsoft Azure

amazon web services

IBM Bluemix

Subscriber

MQTT

Vertical Liquid Filling Machine

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

WEINTEK

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Advanced Model
Specification

	Model	cMT-FHDX-820	cMT-SVRX-820	cMT-SVRX-822	cMT3072X	cMT3072XH	cMT3072XHT
Display	Display	N/A	N/A		7" TFT	7" WVA	7" WVA
	Resolution	N/A	N/A		800 x 480	1024 x 600	1024 x 600
	Brightness (cd/ ㎡)	N/A	N/A		400	450	450
	Contrast Ratio	N/A	N/A		800: 1	800: 1	800: 1
	Backlight Type	N/A	N/A		LED	LED	LED
	Backlight Life Time	N/A	N/A		>30,000 hrs.	>25,000 hrs.	>30,000 hrs.
	Colors	N/A	N/A		16.7M	16.7M	16.7M
	LCD Viewing Angle (T/B/L/R)	N/A	N/A		80/60/80/80	85/85/85/85	85/85/85/85
	Pixel Pitch (mm)	N/A	N/A		0.1926(H) x 0.179(V)	0.1506(H) x 0.1432(V)	0.1506(H) x 0.1432(V)
Touch Panel	Type	N/A	N/A		4-wire Resistive Type	4-wire Resistive Type	4-wire Resistive Type
	Accuracy	N/A	N/A		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	4 GB	4 GB
	RAM	1 GB	1 GB		1 GB	1 GB	1 GB
Processor		Quad-core RISC	Quad-core RISC		Quad-core RISC	Quad-core RISC	Quad-core RISC
I/O Port	SD Card Slot	N/A	Micro SD x1		N/A	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 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 Base-T x 1 LAN 2: 10/100 Base-T x 1	LAN 1: 10/100 Base-T x 1 LAN 2: 10/100 Base-T x 1	LAN 1: 10/100 Base-T x 1 LAN 2: 10/100 Base-T x 1
	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		Con.A: COM2 RS-485 2W/4W, COM3 RS-485 2W, CAN Bus Con.B: COM1 RS-232 4W, COM3 RS-232 2W* MPI is not supported.	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: COM2 RS-485 2W/4W, COM3 RS-485 2W, CAN Bus Con.B: COM1 RS-232 4W, COM3 RS-232 2W*
	CAN Bus	N/A	N/A		Yes	Yes	Yes
	HDMI	Customizable (max. resolution 1920 x 1080)	N/A		N/A	N/A	N/A
	Recommended Resolutions (Please use these recommended screen resolutions to avoid compatibility issues.)	720x480 / 720x576 / 800x600 1024x768 / 1280x720 1366x768 / 1920x1080	N/A		N/A	N/A	N/A
	Audio Output	HDMI Audio Output	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		24±20%VDC	24±20%VDC	24±20%VDC
	Power Isolation	Built-in	Built-in		Built-in	Built-in	Built-in
	Power Consumption	850mA@24VDC	850mA@24VDC		850mA@24VDC	850mA@24VDC	820mA@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
Specification	PCB Coating	Yes	Yes		Yes	Yes	Yes
	Enclosure	Plastic	Plastic		Plastic	Plastic	Aluminum
	Dimensions WxHxD	29.8 x 130 x 115 mm	29.8 x 130 x 115 mm		200.3 x 146.3 x 35.0 mm	200.3 x 146.3 x 35.0 mm	200.4 x 146.5 x 36.0 mm
	Panel Cutout	N/A	N/A		192 x 138 mm	192 x 138 mm	192 x 138 mm
	Weight	Approx. 0.24 kg	Approx. 0.24 kg		Approx. 0.6 kg	Approx. 0.6 kg	Approx. 0.8 kg
	Mount	35 mm DIN rail mounting	35 mm DIN rail mounting		Panel mount	Panel mount	Panel mount
Environment	Protection Structure	IP20	IP20		UL Type 4X (indoor use only) / NEMA4 / IP66 Compliant Front Panel	UL Type 4X (indoor use only) / NEMA4 / IP66 Compliant Front Panel	NEMA4 / IP66 Compliant Front Panel
	Storage Temperature	-20° ~ 60° C (-4° ~ 140° 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	0° ~ 50° C (32° ~ 122° F)	0° ~ 50° C (32° ~ 122° F)		0° ~ 55° C (32° ~ 131° F)	0° ~ 55° C (32° ~ 131° F)	-20° ~ 55° C (-4° ~ 131° F)
	Relative Humidity	10% ~ 90% (non-condensing)	10% ~ 90% (non-condensing)		10% ~ 90% (non-condensing)	10% ~ 90% (non-condensing)	10% ~ 90% (non-condensing)
	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)
Certificate	CE	CE marked	CE marked		CE marked	CE marked	CE marked
	UL	cULus Listed	cULus Listed		cULus Listed	cULus Listed	
Software	EasyBuilder Pro	Built-in	Built-in		Built-in	Built-in	Built-in
	Weincloud	EasyAccess 2.0 (Optional) Dashboard (Optional)	EasyAccess 2.0 (Optional) Dashboard (Optional)	EasyAccess 2.0 (Built-in) Dashboard (Optional)	EasyAccess 2.0 (Optional) Dashboard (Optional)	EasyAccess 2.0 (Optional) Dashboard (Optional)	EasyAccess 2.0 (Optional) Dashboard (Optional)
	CODESYS	Optional	Optional		Optional	Optional	Optional

*cMT3072X/ cMT3072XH/ cMT3072XHT: Only Tx & Rx (no RTS/CTS) may be used for COM1 RS-232 when COM3 RS-232 is also used.
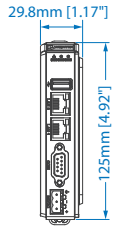
Wide viewing angle
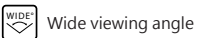
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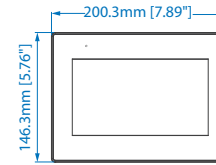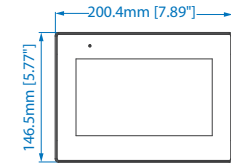| cMT-FHDX-820	cMT-SVRX-820 / cMT-SVRX-822	cMT3072X	cMT3072XH	cMT3072XHT
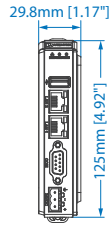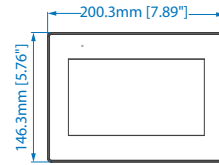
cMT-FHDX-820

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

Front View

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

Side View

Top View

Bottom View

cMT-SVRX-820 / cMT-SVRX-822

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

Front View

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

Side View

Top View

Bottom View

cMT3072X

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"]
192mm [7.559"] W x 138mm [5.433"] H

Cutout Dimensions

cMT3072XH

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"]
192mm [7.559"] W x 138mm [5.433"] H

Cutout Dimensions

cMT3072XHT

200.4mm [7.89"]
146.5mm [5.77"]

Front View

190.6mm [7.50"]
136.6mm [5.38"]

Rear View

36mm [1.42"]
6.4mm [0.25"]
29.6mm [1.17"]

Bottom View

192mm [7.56"]
138mm [5.43"]
192mm [7.559"] W x 138mm [5.433"] H
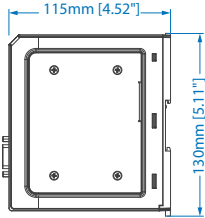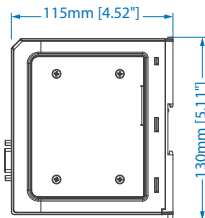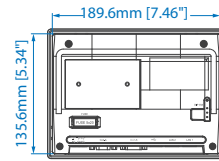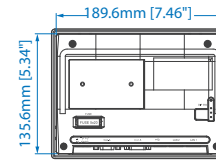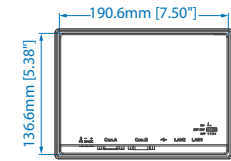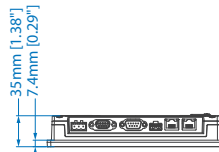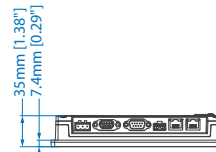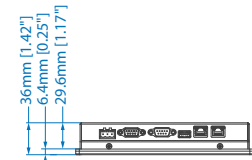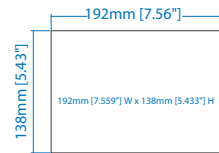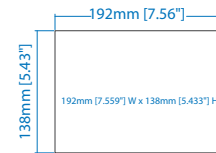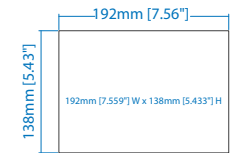
Cutout Dimensions

Specification

Model		cMT3092X	cMT3108XH	cMT3102X	cMT3152X	cMT3162X
Display	Display	9.7" TFT	10.1" WVA	10.1" TFT	15" WVA	15.6" WVA
	Resolution	1024 x 768	1280 x 800	1024 x 600	1024 x 768	1920 x 1080
	Brightness (cd/ ㎡)	350	500	350	350	300
	Contrast Ratio	500:1	800:1	500:1	2500: 1	800: 1
	Backlight Type	LED	LED	LED	LED	LED
	Backlight Life Time	>30,000 hrs.	>50,000 hrs.	>50,000 hrs.	>70,000 hrs.	>30,000 hrs.
	Colors	262K	16.7M	16.7M	16.2M	16.2M
	LCD Viewing Angle (T/B/L/R)	60/70/70/70	89/89/89/89	70/70/80/80	88/88/88/88	89/89/89/89
	Pixel Pitch (mm)	0.192(H) x 0.192(V)	0.1695 (H) x 0.1695 (V)	0.2175 (H) x 0.2088 (V)	0.297(H) x 0.297(V)	0.17925(H) x 0.17925(V)
Touch Panel	Type	4-wire Resistive Type	4-wire Resistive 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%	Active Area Length(X)±2%, Width(Y)±2%	Active Area Length(X)±2%, Width(Y)±2%	N/A	N/A
Memory	Flash	4 GB	4 GB	4 GB	4 GB	4 GB
	RAM	1 GB	1 GB	1 GB	1 GB	1 GB
Processor		Quad-core RISC	Quad-core RISC	Quad-core RISC	Quad-core RISC	Quad-core RISC
I/O Port	SD Card Slot	N/A	N/A	N/A	SD/SDHC	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 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	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
	WiFi	N/A	M02 WiFi Expansion Module (Optional)	M02 WiFi Expansion Module (Optional)	N/A	N/A
	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: COM2 RS-485 2W/4W, COM3 RS-485 2W, CAN Bus Con.B: COM1 RS-232 4W, COM3 RS-232 2W*	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	N/A	N/A	Yes	N/A
	CAN Bus	Yes	Yes	Yes	Yes	Yes
	Audio Output	Built-in Mono Speaker	Built-in Mono Speaker	N/A	Built-in Mono Speaker Audio Line Out - 3.5 mm jack x 1	Built-in Mono Speaker
RTC		Built-in	Built-in	Built-in	Built-in	Built-in
Power	Input Power	24±20%VDC	24±20%VDC	24±20%VDC	24±20%VDC	24±20%VDC
	Power Isolation	Built-in	Built-in	Built-in	Built-in	Built-in
	Power Consumption	1A@24VDC	700mA@24VDC	1A@24VDC	1.3A@24VDC	1.3A@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
Specification	PCB Coating	Yes	Yes	Yes	Yes	Yes
	Enclosure	Plastic	Plastic	Plastic	Front bezel: Plastic, Rear Enclosure: Aluminum	Front bezel: Plastic, Rear Enclosure: Aluminum
	Dimensions WxHxD	260.6 x 203.1 x 44.5 mm	266 x 196 x 40 mm	271 x 213 x 38 mm	366 x 293 x 51.5 mm	400 x 263 x 27.6 mm
	Panel Cutout	250 x 192 mm	255 x 185 mm	260 x 202 mm	352 x 279 mm	384 x 247 mm
	Weight	Approx. 1 kg	Approx. 1.1 kg	Approx. 1.2 kg	Approx. 2.85 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 75 x 75 mm	Panel mount, VESA mount 75 x 75 mm	Panel mount, VESA mount 100 x 100 mm
Environment	Protection Structure	UL Type 4X (indoor use only) / NEMA4 / IP66 Compliant Front Panel	NEMA4 / IP66 Compliant Front Panel	UL Type 4X (indoor use only) / NEMA4 / IP66 Compliant Front Panel	NEMA4 / IP66 Compliant Front Panel	NEMA4 / IP66 Compliant Front Panel
	Storage Temperature	-20° ~ 60° C (-4° ~ 140° 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	0° ~ 50° C (32° ~ 122° F)	0° ~ 55° C (32° ~ 131° 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)
	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)
Certificate	CE	CE marked	CE marked	CE marked	CE marked	CE marked
	UL	cULus Listed		cULus Listed	cULus Listed	cULus Listed
Software	EasyBuilder Pro	Built-in	Built-in	Built-in	Built-in	Built-in
	Weincloud	EasyAccess 2.0 (Built-in) Dashboard (Optional)	EasyAccess 2.0 (Optional) Dashboard (Optional)	EasyAccess 2.0 (Optional) Dashboard (Optional)	EasyAccess 2.0 (Built-in) Dashboard (Optional)	EasyAccess 2.0 (Optional) Dashboard (Optional)
	CODESYS	Optional	Optional	Optional	Optional	Optional

*cMT3092X/ cMT3108XH/ cMT3102X/ cMT3152X/ cMT3162X: Only Tx & Rx (no RTS/CTS) may be used for COM1 RS-232 when COM3 RS-232 is also used.
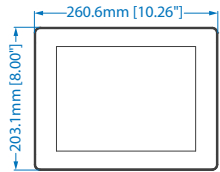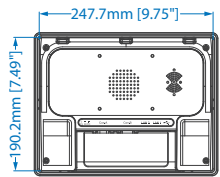
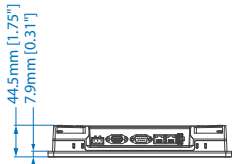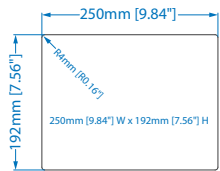Wide viewing angle   Capacitive Type   Vibration Alert

Dimensions

cMT3092X	cMT3108XH	cMT3102X	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"]
192mm [7.56"]
R4mm [R0.16"]
250mm [9.84"] W x 192mm [7.56"] H

Cutout Dimensions

cMT3108XH

266mm [10.47"]
196mm [7.71"]

Front View

253.6mm [9.98"]
183.6mm [7.23"]

Rear View

40mm [1.57"]
6.5mm [0.26"]
33.5mm [1.32"]

Bottom View

255mm [10.04"]
185mm [7.28"]
R2mm [R0.08"]
255mm [10.04"] W x 185mm [7.28"] H

Cutout Dimensions

cMT3102X

271mm [10.67"]
213mm [8.38"]

Front View

258.6mm [10.18"]
200.6mm [7.90"]

Rear View

38mm [1.50"]
6.5mm [0.26"]
31.5mm [1.24"]

Bottom View

260mm [10.24"]
202mm [7.95"]
R2mm [R0.08"]
260mm [10.24"] W x 202mm [7.95"] 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"]
352mm [13.86"] W x 279mm [10.98"] H

Cutout Dimensions

cMT3162X

400mm [15.75"]
263mm [10.35"]

Front View

382mm [15.03"]
100mm [3.94"]
100mm [3.94"]
245mm [9.64"]

Rear View

24.9mm [0.98"]
15mm [0.59"]
27.6mm [1.09"]

Bottom View

384mm [15.12"]
247mm [9.72"]
384mm [15.12"] W x 247mm [9.72"] H

Cutout Dimensions

Specification

Model		cMT2078X	cMT2108X2	cMT2158X	cMT2166X
Display	Display	7" TFT	10.1" TFT	15" WVA	15.6" WVA
	Resolution	800 x 480	1024 x 600	1024 x 768	1920 x 1080
	Brightness (cd/ ㎡)	400	350	350	300
	Contrast Ratio	800: 1	500:1	2500: 1	800: 1
	Backlight Type	LED	LED	LED	LED
	Backlight Life Time	>30,000 hrs.	>50,000 hrs.	>70,000 hrs.	>30,000 hrs.
	Colors	16.7M	16.7M	16.2M	16.2M
	LCD Viewing Angle (T/B/L/R)	80/60/80/80	70/70/80/80	88/88/88/88	89/89/89/89
	Pixel Pitch (mm)	0.1926(H) x 0.179(V)	0.2175 (H) x 0.2088 (V)	0.297(H) x 0.297(V)	0.17925(H) x 0.17925(V)
Touch Panel	Type	4-wire Resistive Type	4-wire Resistive Type	4-wire Resistive Type	Tempered Glass, Capacitive Type Hardness Scale 7H
	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%	N/A
Memory	Flash	4 GB	4 GB	4 GB	4 GB
	RAM	1 GB	1 GB	1 GB	1 GB
Processor		Quad-core RISC	Quad-core RISC	Quad-core RISC	Quad-core RISC
I/O Port	SD Card Slot	N/A	N/A	SD/SDHC	N/A
	USB Host	USB 2.0 x 1	USB 2.0 x 1	USB 2.0 x 1	USB 2.0 x 1
	Ethernet	LAN 1: 10/100 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	10/100 Base-T x 1
	WiFi	N/A	M02 WiFi Expansion Module (Optional)	N/A	N/A
	COM Port	Con.A: COM2 RS-485 2W/4W, COM3 RS-485 2W Con.B: COM1 RS-232 4W, COM3 RS-232 2W* MPI is not supported.	Con.A: COM2 RS-485 2W/4W, COM3 RS-485 2W Con.B: COM1 RS-232 4W, COM3 RS-232 2W* MPI is not supported.	Con.A: COM1 RS-485 2W/4W, COM3 RS-485 2W Con.B: COM1 RS-232 4W, COM3 RS-232 2W* MPI is not supported.	Con.A: COM1 RS-485 2W/4W, COM3 RS-485 2W Con.B: COM1 RS-232 4W, COM3 RS-232 2W* MPI is not supported.
	Audio Output	N/A	N/A	Built-in Mono Speaker Audio Line Out - 3.5 mm jack x 1	Built-in Mono Speaker
RTC		Built-in	Built-in	Built-in	Built-in
Power	Input Power	24±20%VDC	24±20%VDC	24±20%VDC	24±20%VDC
	Power Isolation	Built-in	Built-in	Built-in	Built-in
	Power Consumption	820mA@24VDC	1A@24VDC	1.3A@24VDC	0.9A@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
Specification	PCB Coating	Yes	Yes	Yes	Yes
	Enclosure	Plastic	Plastic	Aluminum	Front bezel: Plastic, Rear Enclosure: Aluminum
	Dimensions WxHxD	200.3 x 146.3 x 35.0 mm	271 x 213 x 38 mm	366 x 293 x 48.2mm	400 x 263 x 27.6 mm
	Panel Cutout	192 x 138 mm	260 x 202 mm	352 x 279 mm	384 x 247 mm
	Weight	Approx. 0.6 kg	Approx. 1.2 kg	Approx. 2.74 kg	Approx. 1.6 kg
	Mount	Panel 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	UL Type 4X (indoor use only) / NEMA4 / IP66 Compliant Front Panel	UL Type 4X (indoor use only) / NEMA4 / IP66 Compliant Front Panel	UL Type 4X (indoor use only) / NEMA4 / IP66 Compliant Front Panel	NEMA4 / IP66 Compliant Front Panel
	Storage Temperature	-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	0° ~ 55° C (32° ~ 131° 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)
	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)
Certificate	CE	CE marked	CE marked	CE marked	CE marked
	UL	cULus Listed	cULus Listed	cULus Listed	
Software	EasyBuilder Pro	Built-in	Built-in	Built-in	Built-in
	Weincloud	EasyAccess 2.0 (Optional) Dashboard (Optional)	EasyAccess 2.0 (Optional) Dashboard (Optional)	EasyAccess 2.0 (Optional) Dashboard (Optional)	EasyAccess 2.0 (Optional) Dashboard (Optional)
	CODESYS	Optional	Optional	Optional	N/A

*cMT2078X/ cMT2108X2/ cMT2158X/ cMT2166X: Only Tx & Rx (no RTS/CTS) may be used for COM1 RS-232 when COM3 RS-232 is also used.
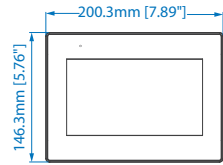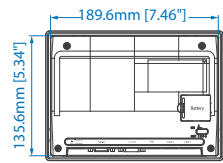
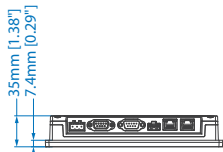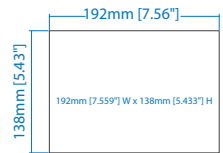Wide viewing angle   Capacitive Type

Dimensions

cMT2078X	cMT2108X2	cMT2158X	cMT2166X
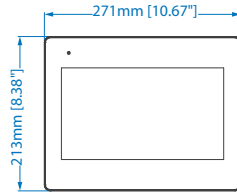
cMT2078X

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"]

192mm [7.559"] W x 138mm [5.433"] H

Cutout Dimensions

cMT2108X2

271mm [10.67"]
213mm [8.38"]

Front View

258.6mm [10.18"]
200.6mm [7.90"]

Rear View

38mm [1.50"]
6.5mm [0.26"]
31.5mm [1.24"]

Bottom View

260mm [10.24"]
202mm [7.95"]
R2mm [R0.08"]

260mm [10.24"] W x 202mm [7.95"] H

Cutout Dimensions

cMT2158X

366mm [14.41"]
293mm [11.54"]

Front View

350mm [13.78"]
277mm [10.91"]

Rear View

48.2mm [1.90"]
24.2mm [0.95"]
6.7mm [0.26"]

Panel-mounting clamp slots, 12 places

Bottom View

352mm [13.86"]
279mm [10.98"]

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

Cutout Dimensions

cMT2166X

400mm [15.75"]
263mm [10.35"]

Front View

382mm [15.03"]
100mm [3.94"]
245mm [9.64"]
100mm [3.94"]

Rear View

24.9mm [0.98"]
15mm [0.59"]
27.6mm [1.09"]

Bottom View

384mm [15.12"]
247mm [9.72"]

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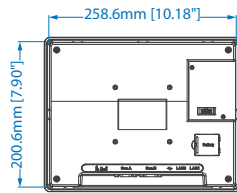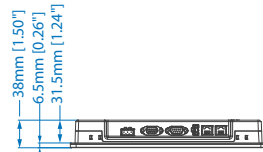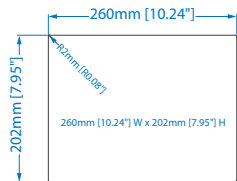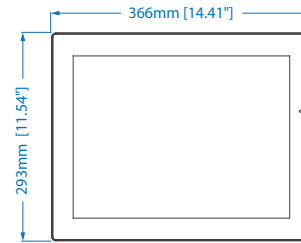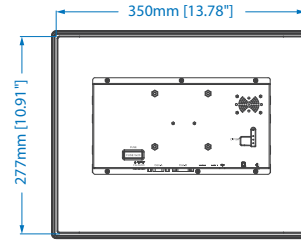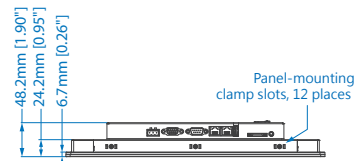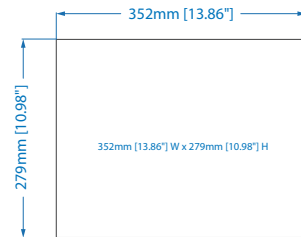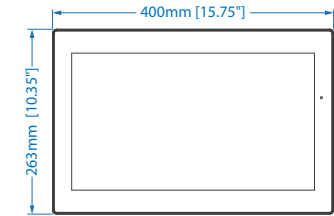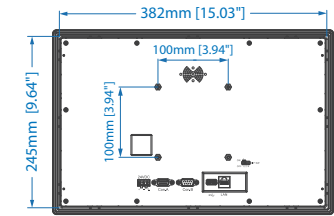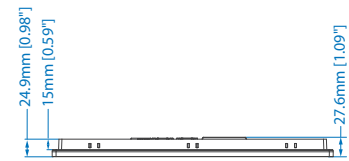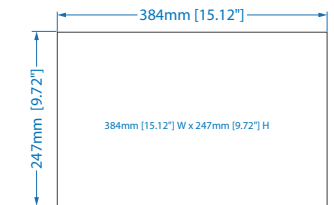
Cutout Dimensions

Basic Model
Specification

Model	cMT1106X
Display	
Display	10.1″ TFT
Resolution	1024 x 600
Brightness (cd/ ㎡)	350
Contrast Ratio	500:1
Backlight Type	LED
Backlight Life Time	>50,000 hrs.
Colors	16.7M
LCD Viewing Angle (T/B/L/R)	70/70/80/80
Pixel Pitch (mm)	0.2175 (H) x 0.2088 (V)
Touch Panel	
Type	4-wire Resistive Type
Accuracy	Active Area Length(X)±2%, Width(Y)±2%
Memory	
Flash	4 GB
RAM	1 GB
Processor	Quad-core RISC
I/O Port	
USB Host	USB 2.0 x 1
Ethernet	10/100 Base-T x 1
WiFi	M02 WiFi Expansion Module (Optional)
COM Port	Con.A: COM2 RS-485 2W/4W, COM3 RS-485 2W Con.B: COM1 RS-232 4W, COM3 RS-232 2W* MPI is not supported.
RTC	Built-in
Power	
Input Power	24±20%VDC
Power Isolation	Built-in
Power Consumption	720mA@24VDC
Voltage Resistance	500VAC (1 min.)
Isolation Resistance	Exceed 50MΩ @ 500VDC
Specification	
PCB Coating	Yes
Enclosure	Plastic
Dimensions WxHxD	271 x 213 x 38 mm
Panel Cutout	260 x 202 mm
Weight	Approx. 1.2 kg
Mount	Panel mount, VESA mount 75 x 75 mm
Environment	
Protection Structure	NEMA4 / IP66 Compliant Front Panel
Storage Temperature	-20° ~ 60° C (-4° ~ 140° F)
Operating Temperature	0° ~ 50° C (32° ~ 122° F)
Relative Humidity	10% ~ 90% (non-condensing)
Vibration Endurance	10 to 25Hz (X, Y, Z direction 2G 30 minutes)
Certificate	
CE	CE marked
Software	
EasyBuilder Pro	Built-in
Weincloud	EasyAccess 2.0 (Optional) Dashboard (Optional)

*cMT1106X: Only Tx & Rx (no RTS/CTS) may be used for COM1 RS-232 when COM3 RS-232 is also used.

Dimensions

cMT1106X

271mm [10.67"]
213mm [8.38"]

Front View

258.6mm [10.18"]
200.6mm [7.90"]

Rear View

38mm [1.50"]
6.5mm [0.26"]
31.5mm [1.24"]

Bottom View

260mm [10.24"]
202mm [7.95"]
R2mm [R0.08"]
260mm [10.24"] W x 202mm [7.95"] H

Cutout Dimensions

Specification

Model	M02
Network	
WiFi	IEEE 802.11 b/g/n 802.11b: max 19.76 dBm 802.11g: max 19.93 dBm 802.11n: max 19.99 dBm
I/O Port	
SMA Female Connector	1
Male Connector to HMI	1
Power	
Input Power	5VDC
Power Consumption	900mA@5VDC (powered by HMI)
Voltage Resistance	500VAC (1min.)
Isolation Resistance	Exceed 50MΩ @ 500VDC
Specification	
PCB Coating	N/A
Enclosure	Plastic
Dimensions WxHxD	54.5 x 80 x 24.1 mm
Weight	Approx. 80 g
Mount	HMI connector + diagonal screw fastening
Environment	
Protection Structure	M02: IP20 Compliant Antenna: IP66 Compliant
Storage Temperature	-20° ~ 60° C (-4° ~ 140° F)
Operating Temperature	0° ~ 50° C (32° ~ 122° F)
Relative Humidity	10% ~ 90% (non-condensing)
Vibration Endurance	10 to 25Hz (X, Y, Z direction 2G 30 minutes)
Certificate	
CE	CE marked
UL	cULus Listed
Software	
EasyBuilder Pro	Built-in

Dimensions

M02

54.5mm [2.15"]

80mm [3.15"]

Front View

24.1mm [0.95"]

Side View

Ø61.5mm [Ø3.21"]

2000mm [78.74"]

SMA Male Connector

RG174 Black Coaxial Cable

16mm [0.63"]

Foam Sticker

60mm [2.36"]
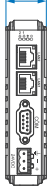Wire bending dimension (Min.)

Antenna

Specification

Model		cMT-G01	cMT-G02	cMT-G03	cMT-G04
Memory	Flash	256 MB	256 MB	256 MB	256 MB
	RAM	256 MB	256 MB	256 MB	256 MB
Processor		32-bit RISC 600MHz	32-bit RISC 600MHz	32-bit RISC 528MHz	32-bit RISC 528MHz
I/O Port	Ethernet	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)
	WiFi	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, RS-485 2W/4W COM2: RS-232 2W, RS-485 2W/4W	N/A
RTC		Built-in	Built-in	Built-in	Built-in
Power	Input Power	24±20%VDC	10.5~28VDC	10.5~28VDC	10.5~28VDC
	Power Isolation	Built-in	Built-in	Built-in	Built-in
	Power Consumption	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.)
	Isolation Resistance	Exceed 50MΩ @ 500VDC	Exceed 50MΩ @ 500VDC	Exceed 50MΩ @ 500VDC	Exceed 50MΩ @ 500VDC
Specification	PCB Coating	Yes	Yes	Yes	Yes
	Enclosure	Plastic	Plastic	Plastic	Plastic
	Dimensions WxHxD	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. 0.14 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
Environment	Protection Structure	IP20	IP20	IP20	IP20
	Storage Temperature	-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	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)
	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)
Certificate	CE	CE marked	CE marked	CE marked	CE marked
	UL	cULus Listed	cULus Listed	cULus Listed	cULus Listed
Software	EasyBuilder Pro	Built-in	Built-in	Built-in	Built-in
	EasyAccess 2.0	Optional	Optional	Optional	Optional

Dimensions

cMT-G01	cMT-G02	cMT-G03	cMT-G04
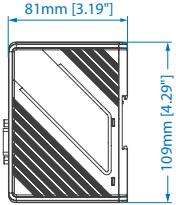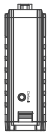
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Front View　　Front View　　Front View　　Front View

81mm [3.19"]　　81mm [3.19"]　　81mm [3.19"]　　81mm [3.19"]

109mm [4.29"]　　109mm [4.29"]　　109mm [4.29"]　　109mm [4.29"]
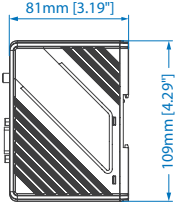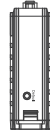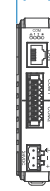
Side View　　Side View　　Side View　　Side View
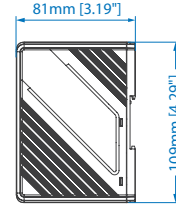
Top View　　Top View　　Top View　　Top View
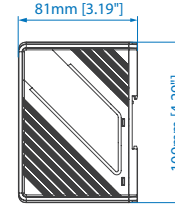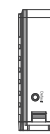
Bottom View　　Bottom View　　Bottom View　　Bottom View

Specification

	Model	cMT-CTRL01	cMT-SVR-100	cMT-SVR-102	cMT-SVR-200	cMT-SVR-202
Memory	Flash	4 GB	256 MB		256 MB	
	RAM	512 MB	256 MB		256 MB	
	Data, Memory, Code	3 MB	N/A		N/A	
	Retain area	16 KB (every minute) (Kept after reboots)	N/A		N/A	
	Persistent area	16 KB (every minute) (Kept after downloads)	N/A		N/A	
	File system	8MB	N/A		N/A	
Processor		Dual-Core 32 bits RISC 1GHz	32-bit RISC 600MHz		32-bit RISC 600MHz	
I/O Port	SD Card Slot	SD/SDHC	SD/SDHC		SD/SDHC	
	USB Host	N/A	USB 2.0 x 1		USB 2.0 x 1	
	Ethernet	Ethernet 1: 10/100/1000 Base-T x 1 Ethernet 2: 10/100 Base-T x 1	10/100/1000 Base-T x 2		10/100/1000 Base-T x 1	
	WiFi	N/A	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	
	COM Port	COM1: RS-232 2W COM2: RS-485 2W/4W COM3: RS-485 2W	COM1: RS-232 COM2: RS-485 2W/4W COM3: RS-485 2W		COM1: RS-232 2W COM2: RS-485 2W/4W COM3: RS-485 2W	
	Local bus	iBus	N/A		N/A	
CODESYS	Protocol	Modbus TCP/IP Master, EtherCAT Master	N/A		N/A	
RTC		Built-in	Built-in		Built-in	
Power	Input Power	24±20%VDC	24±20%VDC		10.5~28VDC	
	Power Isolation	Built-in	Built-in		Built-in	
	Power Dissipation	Nominal 310mA@24VDC	N/A		N/A	
	Current for Internal Bus	Max 2A@5VDC	N/A		N/A	
	Current Consumption	550mA@5VDC	N/A		N/A	
	Power Consumption	Nominal 310mA@24VDC	230mA@24VDC		1A@12VDC ; 450mA@24VDC	
	Voltage Resistance	500VAC (1 min.)	500VAC (1 min.)		500VAC (1 min.)	
	Isolation Resistance	Exceed 50MΩ @ 500VDC	Exceed 50MΩ @ 500VDC		Exceed 50MΩ @ 500VDC	
Specification	PCB Coating	Yes	Yes		Yes	
	Enclosure	Plastic	Plastic		Plastic	
	Dimensions WxHxD	50 x 109 x 81 mm	27 x 130 x 115 mm		27 x 130 x 115 mm	
	Weight	Approx. 0.24 kg	Approx. 0.18 kg		Approx. 0.18 kg	
	Mount	35 mm DIN rail mounting	35 mm DIN rail mounting		35 mm 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	-10° ~ 50° C (14° ~122° F)	-20° ~ 55° C (-4° ~ 131° F)		-10° ~ 55° C (14° ~ 131° F)	
	Relative Humidity	10% ~ 90% (non-condensing)	10% ~ 90% (non-condensing)		10% ~ 90% (non-condensing)	
	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)	
Certificate	CE	CE marked	CE marked		CE marked	
	UL	cULus Listed	cULus Listed		cULus Listed	
Software	EasyBuilder Pro	Built-in	Built-in		Built-in	
	EasyAccess 2.0	Optional	Optional	Built-in	Optional	Built-in
	CODESYS	Built-in	N/A		N/A	

Dimensions

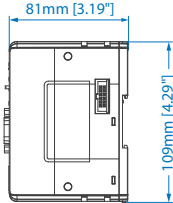| cMT-CTRL01	cMT-SVR-100 / cMT-SVR-102	cMT-SVR-200 / cMT-SVR-202
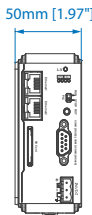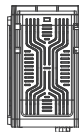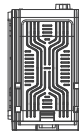
50mm [1.97"]

Front View

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

Front View

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

Front View

81mm [3.19"]
109mm [4.29"]

Side View

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

Side View

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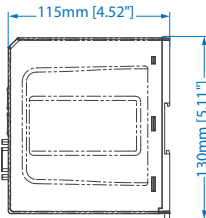
Side View

Top View

Top View
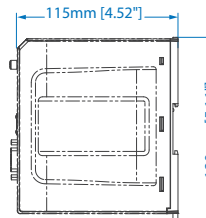
Top View

Bottom View

Bottom View

Bottom View

iR Series

Communication Interface Specifications

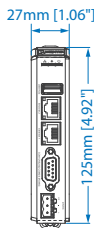|	Model	iR-ETN	iR-COP	iR-ECAT
Expansion I/O module	Number of Bus Terminals	Depends on Power Consumption	Depends on Power Consumption	Depends on Power Consumption
	Digital Input Point	Max. 256	Max. 256	Max. 256
	Digital Output Point	Max. 128	Max. 128	Max. 128
	Analog Input Channel	Max. 64	Max. 64	Max. 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, EtherNet/IP adapter	CANopen Slave	EtherCAT Slave
Isolation		Network to Logic Isolation : Yes	CAN bus Isolation : Yes	Network to Logic Isolation : Yes
No. of Ports		1	2	2
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
	Power Isolation	Yes	Yes	Yes
	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 EN 55032: 2012+AC: 2013, Class A EN 61000-6-4: 2007+A1:2011 EN 55024: 2010+A1: 2015 EN 61000-6-2:2005	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	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
	UL	cULus Listed	cULus Listed	cULus Listed

Communication Interface Specifications

Model	iR-ETN40R
Expansion I/O Module	
No. of Bus Terminals	Depends on Power Consumption
Digital Input Point	Max. 224
Digital Output Point	Max. 112
Analog Input Channel	Max. 64
Analog Output Channel	Max. 64
Data Transfer Rate	10/100 Mbps
Max. Number of TCP/IP Connections	8 connections
Protocol	Modbus TCP Server, EtherNet/IP adapter
Isolation	Network to Logic Isolation : Yes
No. of Ports	1
Digital Output	
Total Number of Outputs	16
Output Logic	Relay
Output Voltage	250VAC/30VDC
Output Current	2A per channel (Max 8A)
Digital Input	
Total Number of Inputs	24
General Input Input Logic	Sink or Source
Number of Inputs	20
Logic 1 Input Voltage	15~28 VDC
Logic 0 Input Voltage	0~5 VDC
Input Impedance	5.6 KΩ
High-speed Input Number of Inputs	4
Input Logic	SINK INPUT (PNP)
Logic 1 Input Voltage	15~28 VDC
Logic 0 Input Voltage	0~5 VDC
Max. Input Frequency	20KHz
Input Impedance	3 KΩ
Isolation	Input: Yes, optical isolation, Output: Yes, electromagnetic isolation
Power Power Supply	24 VDC (-15%/+20%)
Power Dissipation	Nominal 255mA @ 24VDC
Current for Internal Bus	Max 2A @ 5VDC
Current Consumption	520mA @ 5VDC
Power Isolation	Yes
Back-up Fuse	≤ 1.6A Self-recovery
Specification PCB Coating	Yes
Enclosure	Plastic
Dimensions WxHxD	64x 109 x 81 mm
Weight	Approx. 0.27 kg
Mount	35mm DIN rail mounting
Environment Protection Structure	IP20
Storage Temperature	-20° ~ 70° C (-4° ~ 158° F)
Operating Temperature	-10° ~ 60° C (14° ~ 140° F)
Relative Humidity	10% ~ 90% (non-condensing)
Certificate 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
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
UL	cULus Listed

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	-
Indicators	Red LED Input State	
Output Voltage	24VDC	Meets the Requirements of ANSI Standards TIA/EIA-485-A
Output Current	50 mA	
Max. input frequency	200KHz	2MHz
Max. 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	
UL	cULus Listed	

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)
Isolation	Input: Optical Isolation Output: N/A	Input: Optical Isolation Output: Optical Isolation	Input: Optical Isolation Output: Optical Isolation	Input: N/A Output: Optical Isolation	Input: N/A Output: Optical Isolation	Input: N/A Output: Electromagnetic Isolation

Specification	Enclosure	Plastic
	Dimensions WxHxD	27 x 109 x 81 mm
	Weight	Approx. 0.12 kg — (iR-DQ08-R) 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 — (iR-DQ08-R) 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
	UL	cULus Listed

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 — (iR-AQ04-VI) 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
	UL	cULus Listed

Quick Feature Comparison

Legend: ▢ Basic Model ▢ Standard Model ▢ Advanced Model ▢ Other Model

	cMT1106X	cMT2078X	cMT2108X2	cMT2158X	cMT2166X	cMT3072X cMT3072XH cMT3072XHT	cMT3092X	cMT3102X	cMT3108XH	cMT3152X	cMT3162X	cMT-FHDX-820	cMT-SVRX-820 cMT-SVRX-822	cMT-SVR-100/102 cMT-SVR-200/202
Audio Output				●	●		●		●	●	●	via HDMI		
WiFi	Optional (M02 Module)		Optional (M02 Module)					Optional (M02 Module)	Optional (M02 Module)					cMT-SVR-200
CAN Bus						●	●	●	●	●	●			
Siemens MPI						cMT3072XH cMT3072XHT ●	●	●	●	●	●	●	●	●
Vibration Feedback											●			
Touch Gesture					●					●	●			
3G/4G Dongle	●	●	●	●	●	●	●	●	●	●	●	●	●	●
cMT Viewer		●	●	●	●	●	●	●	●	●	●	●	●	●
EasyWeb 2.0	●	●	●	●	●	●	●	●	●	●	●	●	●	●
WebView		●	●	●	●	●	●	●	●	●	●	●	●	●
VNC Server	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Barcode Scanner (Android)						●	●	●	●	●	●	●	●	●
Event Bar Chart						●	●	●	●	●	●	●	●	●
IP Camera/ Media Player		●	●	●	●	●	●	●	●	●	●	●		
Picture View File Browser PDF Reader	●	●	●	●	●	●	●	●	●	●	●	●		
PLC Web Browser						●	●	●	●	●	●	●		
Energy Demand						●	●	●	●	●	●	●	●	●
MQTT	● *	●	●	●	●	●	●	●	●	●	●	●	●	●
OPC UA Client	●	●	●	●	●	●	●	●	●	●	●	●	●	●
OPC UA Server						●	●	●	●	●	●	Optional	●	Optional
Database Server						●	●	●	●	●	●	●	●	●
SQL Query						●	●	●	●	●	●	●	●	●
CODESYS		Optional	Optional	Optional		Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	
Dashboard	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	
EasyAccess 2.0	Optional	Optional	Optional	Optional	Optional	Optional	Built-in	Optional	Optional	Built-in	Optional	Optional	cMT-SVRX-820 Optional / cMT-SVRX-822 Built-in License	cMT-SVR-100 cMT-SVR-200 Optional / cMT-SVR-102 cMT-SVR-202 Built-in License

*Dashboard requires EasyBuilder Pro V6.06.01 or later versions.
*cMT1106X AWS IoT, Sparkplug B, Azure IoT Hub, Google Cloud IoT Core is not supported.

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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.

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