



Industry 4.0
IIoT Platform

IIoT 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.

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.



Remote I/O



PLC



CODESYS

- ▶ CODESYS runs on an independent core (Optional).
- ▶ Supports CANopen and Modbus TCP/IP.
- ▶ Supports applications using I/O modules.

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 IIoT 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.



MQTT
OPC UA
Modbus

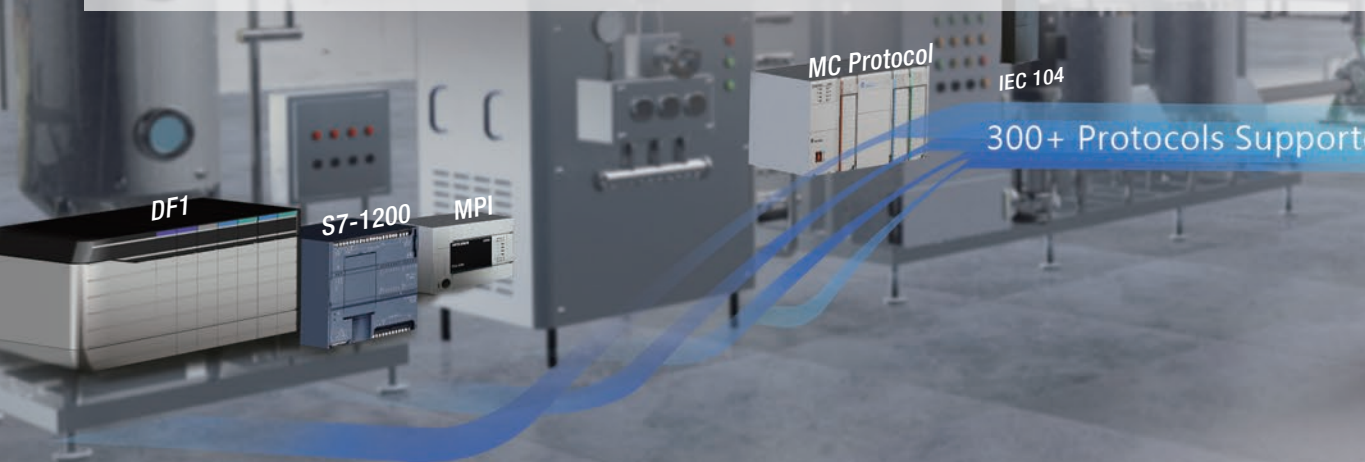


2 CMT G Series IIoT Edge Gateway

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 setting, PLC communication parameter setting, data log and event log view, etc.
- ▶ The box shaped and 35mm DIN rail mountable design makes the model an easy fit in diverse settings.



300+ Protocols Supported



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.

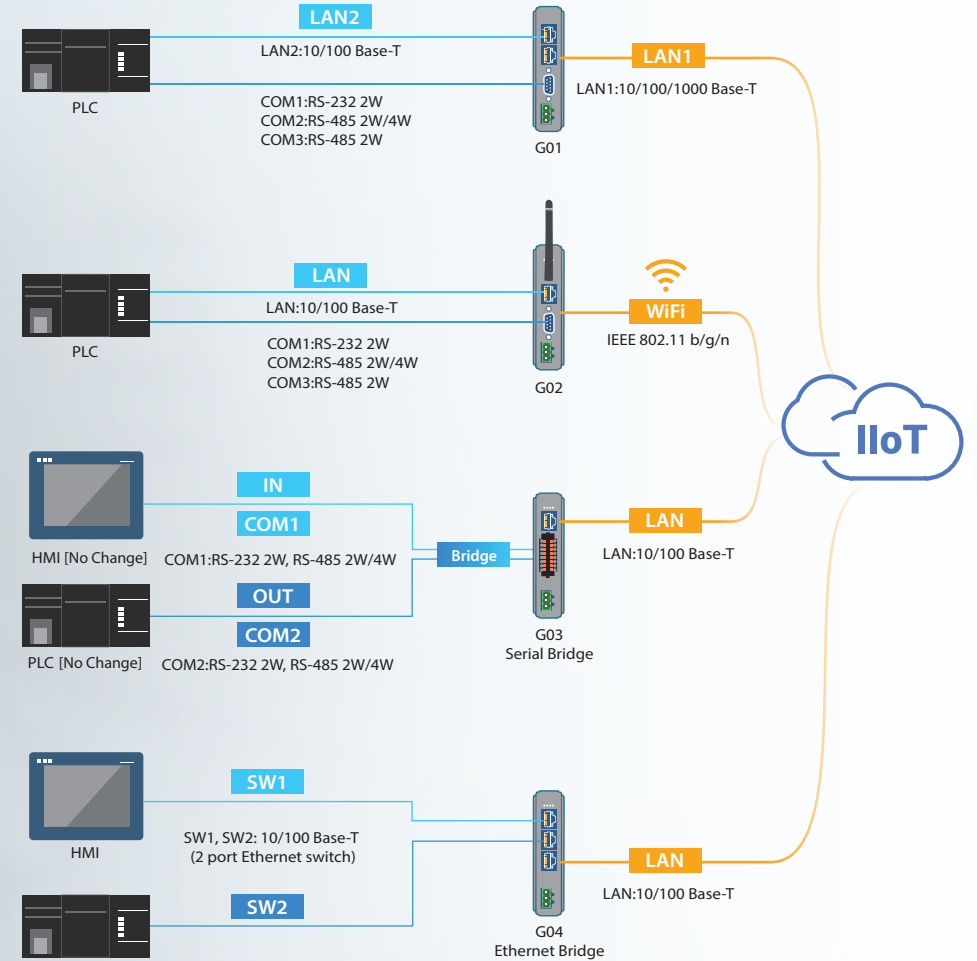
3 Major Industrial Communication Protocols



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



3

cMT-CTRL+iR Series

IloT Gateway / Motion Control / Remote I/O

IloT



EasyBuilder Pro | CODESYS

cMT-CTRL01

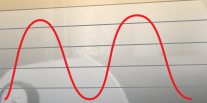
An IloT Programmable Logic Controller that integrates CODESYS and Gateway.

iR Series

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

Heater Portion Valve

SV 41.19 °C
PV 41.12 °C



4

HMI with External Touch Monitor / TV of Your Own Choice

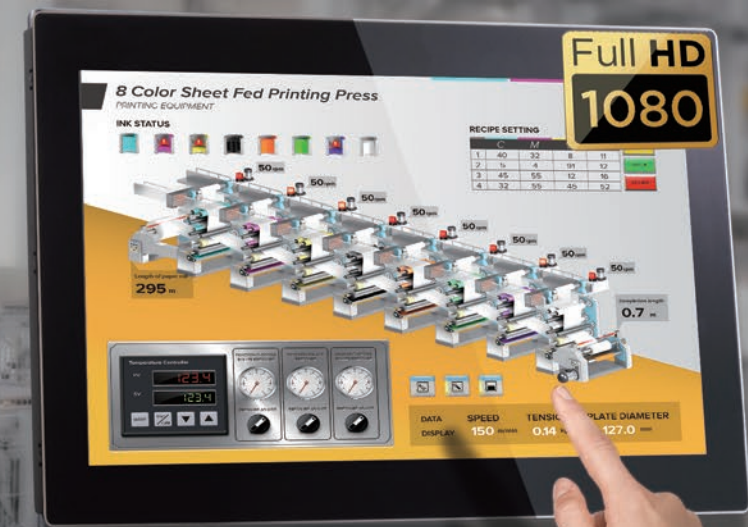
Features

- ▶ 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 IloT Protocol: MQTT



cMT-FHD

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



cMT-iM21

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.

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

- ▶ 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 IloT datacenter.
- ▶ Supports synchronization of sampled data and event log to SQL database.

Smart HMI

Monitor Mode
Up to 50 HMIs can be monitored simultaneously.



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.

EasyLauncher / cMT Viewer

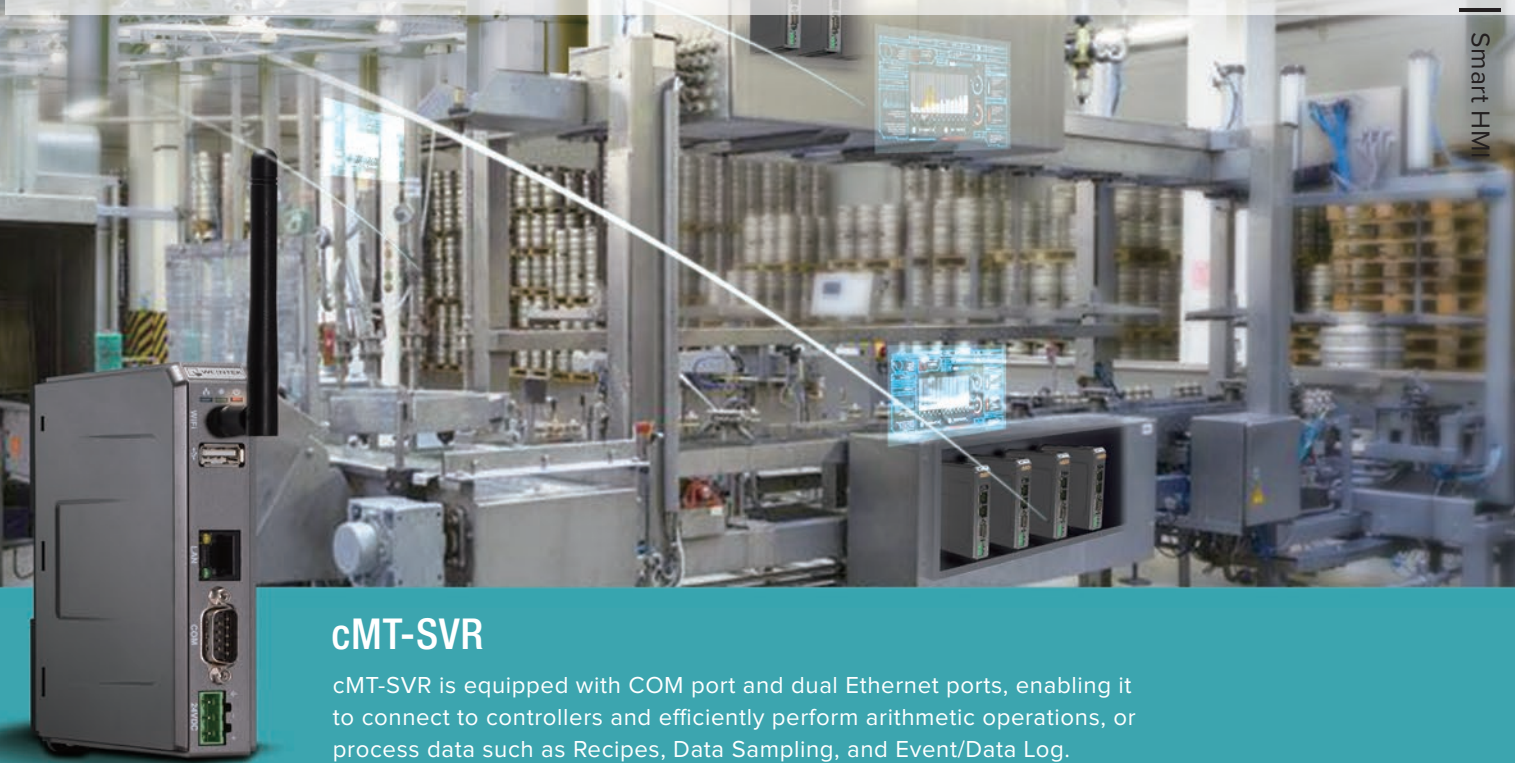
- ▶ cMT Viewer APP
- ▶ cMT Smart Monitor and Control - Monitor Mode
- ▶ Application Management - EasyLauncher

Windows10
IoT

Easy
Launcher

cMT
Viewer

Monitor
Mode



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 »



1. Push Notification

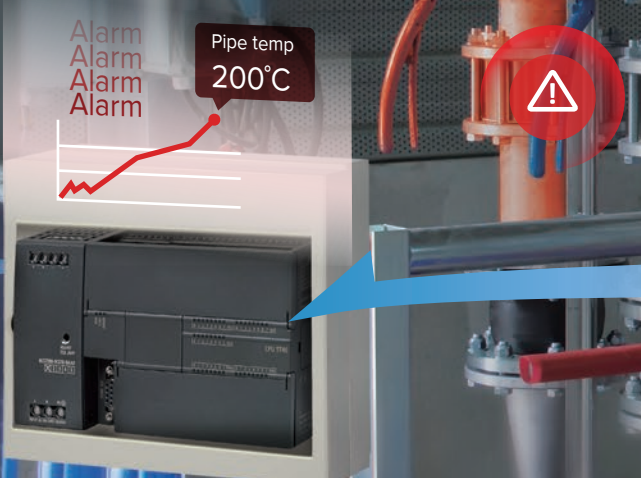
- ▶ Get notified on the mobile phone, wherever you might be.

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.

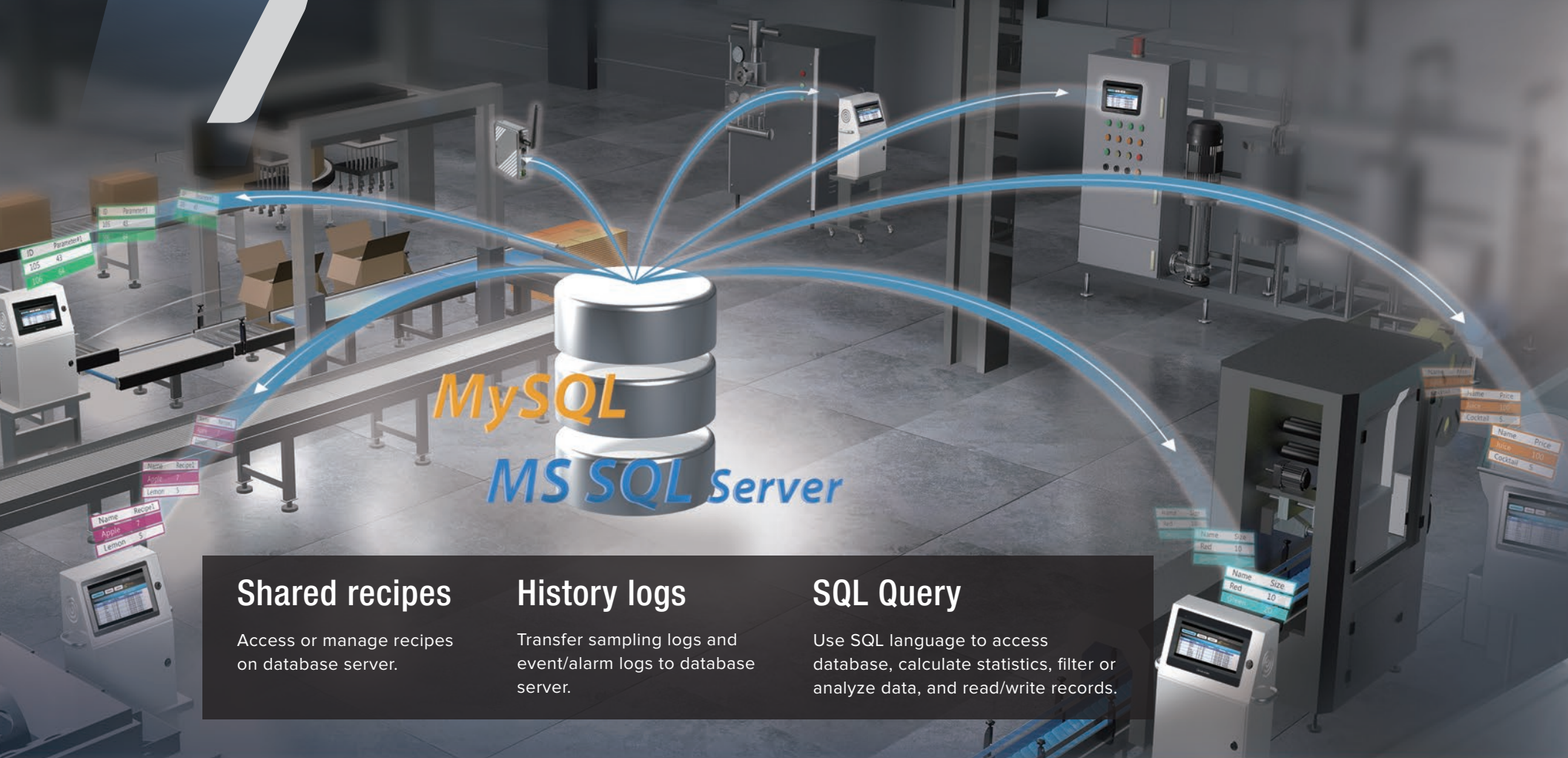
3. Remote Monitoring

- ▶ 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



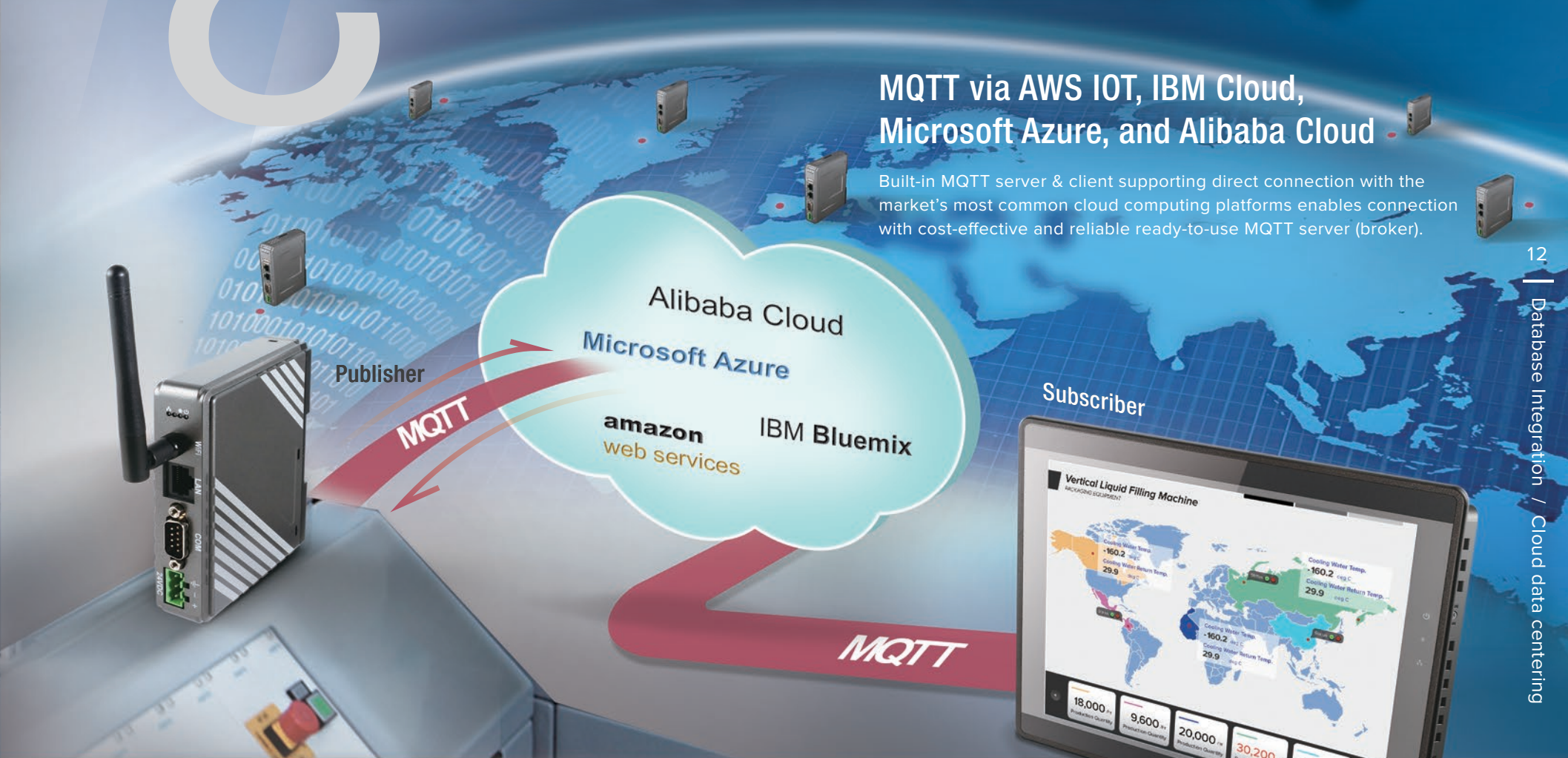
MySQL
MS SQL Server

- 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).

Alibaba Cloud
Microsoft Azure
amazon web services
IBM Bluemix

Subscriber

Publisher

MQTT

MQTT

12 | Database Integration / Cloud data centering

* 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.

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/ m ²)	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)
	PCB Coating	Yes	Yes	Yes
Specification	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 27.6 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	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)
	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 Built-in EasyAccess 2.0 CODESYS (Optional)	EasyBuilder Pro Built-in EasyAccess 2.0 CODESYS (Optional)	EasyBuilder Pro EasyAccess 2.0 (Optional) CODESYS (Optional)

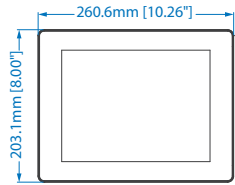
*cMT3092X/ cMT3152X/ cMT3162X: Only Tx & Rx (no RTS/CTS) may be used for COM1 RS-232 when COM3 RS-232 is also used.

*cMT3152X / cMT3162X : Supports multi-touch gestures.

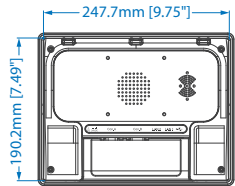
*cMT3162X: Supports vibrational feedback.

Dimensions

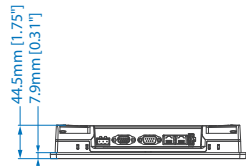
cMT3092X



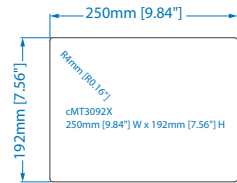
Front View



Rear View

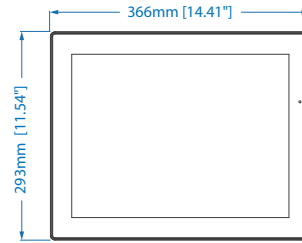


Bottom View

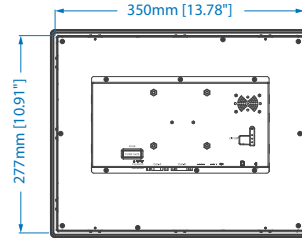


Cutout Dimensions

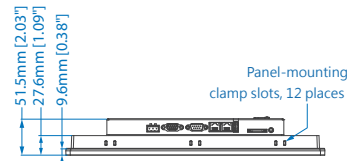
cMT3152X



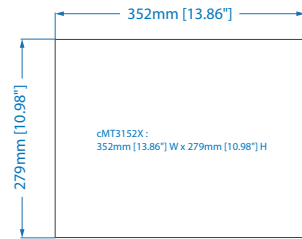
Front View



Rear View

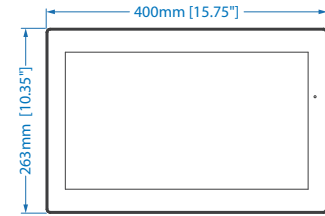


Bottom View

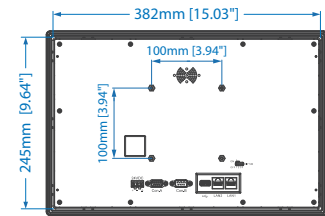


Cutout Dimensions

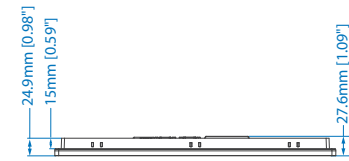
cMT3162X



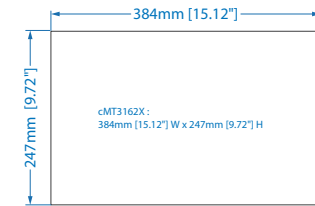
Front View



Rear View



Bottom View



Cutout Dimensions

Specification

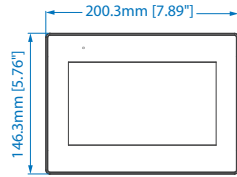


	Model	cMT3071	cMT3072	cMT3103
Display	Display	7" TFT	7" IPS	10.1" TFT
	Resolution	800 x 480	1024 x 600	1024 x 600
	Brightness (cd/ m ²)	400	450	350
	Contrast Ratio	800: 1	800: 1	500:1
	Backlight Type	LED	LED	LED
	Backlight Life Time	>30,000 hrs.	>25,000 hrs.	>50,000 hrs.
	Colors	16.7M	16.7M	16.7M
	LCD 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)	0.2175(H) x 0.2088(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	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 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
	Wi-Fi	N/A	N/A	IEEE 802.11 b/g/n 802.11b: max 19.25 dBm 802.11g: max 13.74 dBm 802.11n: max 15.01 dBm
	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/COM3 RS-232*
	CAN Bus	Yes	Yes	Yes
	RTC		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	UL Type 4X (indoor use only) / 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)
	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 EasyAccess 2.0 (Optional) CODESYS (Optional)	EasyBuilder Pro Built-in EasyAccess 2.0 CODESYS (Optional)	EasyBuilder Pro Built-in EasyAccess 2.0

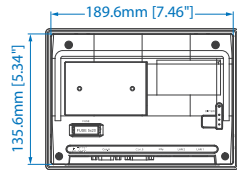
*cMT3071/ cMT3072/ cMT3103: Only Tx & Rx (no RTS/CTS) may be used for COM1 RS-232 when COM3 RS-232 is also used.

Dimensions

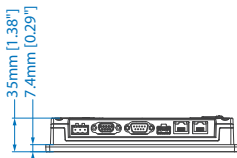
cMT3071



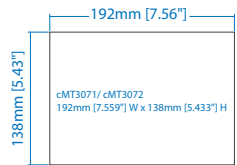
Front View



Rear View

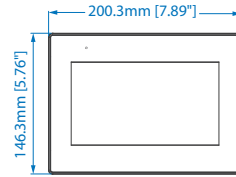


Bottom View

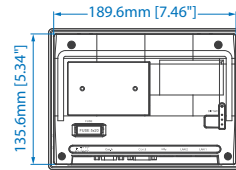


Cutout Dimensions

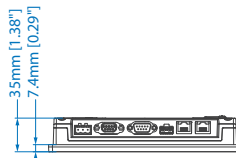
cMT3072



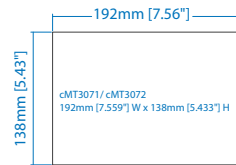
Front View



Rear View

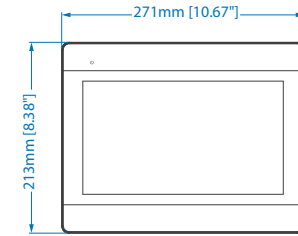


Bottom View

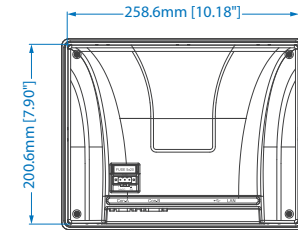


Cutout Dimensions

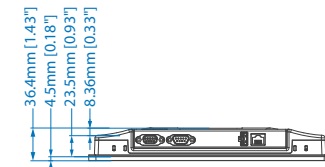
cMT3103



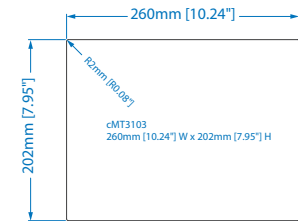
Front View



Rear View



Bottom View



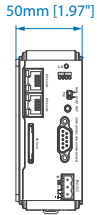
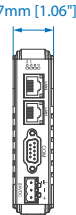
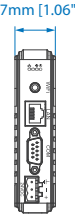
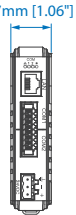
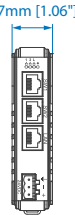
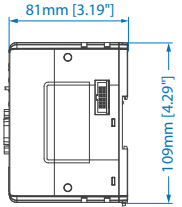
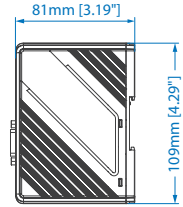
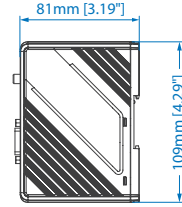
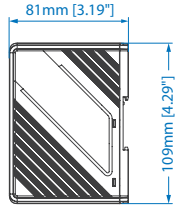
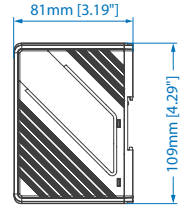
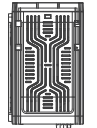
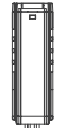
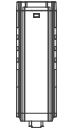


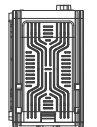



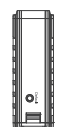
Cutout Dimensions

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, EtherCAT 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
	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	Nominal 310mA@24VDC	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
 <p>50mm [1.97"]</p>	 <p>27mm [1.06"]</p>	 <p>27mm [1.06"]</p>	 <p>27mm [1.06"]</p>	 <p>27mm [1.06"]</p>
<p>Front View</p>	<p>Front View</p>	<p>Front View</p>	<p>Front View</p>	<p>Front View</p>
 <p>81mm [3.19"]</p> <p>109mm [4.29"]</p>	 <p>81mm [3.19"]</p> <p>109mm [4.29"]</p>	 <p>81mm [3.19"]</p> <p>109mm [4.29"]</p>	 <p>81mm [3.19"]</p> <p>109mm [4.29"]</p>	 <p>81mm [3.19"]</p> <p>109mm [4.29"]</p>
<p>Side View</p>	<p>Side View</p>	<p>Side View</p>	<p>Side View</p>	<p>Side View</p>
				
<p>Top View</p>	<p>Top View</p>	<p>Top View</p>	<p>Top View</p>	<p>Top View</p>
				
<p>Bottom View</p>	<p>Bottom View</p>	<p>Bottom View</p>	<p>Bottom View</p>	<p>Bottom View</p>

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/ m ²)	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	
Memory	Flash	256 MB		256 MB		4 GB	
	RAM	256 MB		256 MB		1 GB	
Processor		32-bit RISC 600MHz		32-bit RISC 600MHz		32-bit RISC 1GHz (Two 2D Graphics Engine)	
I/O Port	SD Card Slot	SD/SDHC		SD/SDHC		N/A	
	USB Host	USB 2.0 x 1		USB 2.0 x 1		USB 2.0 x 1	
	USB Client	N/A		N/A		N/A	
	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	
	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	
	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	
	HDMI	N/A		N/A		Resolution 1920 x 1080 (customizable)	
	Audio Output	N/A		N/A		HDMI Audio Output	
RTC		Built-in		Built-in		Built-in	
Power	Input Power	24±20%VDC		10.5~28VDC		10.5~28VDC	
	Power Isolation	Built-in		Built-in		Built-in	
	Power Consumption	230mA@24VDC		1000mA@12VDC ; 450mA@24VDC		1250mA@12VDC ; 550mA@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	27 x 130 x 115 mm		27 x 130 x 115 mm		29.8 x 130 x 115 mm	
	Panel Cutout	N/A		N/A		N/A	
	Weight	Approx. 0.18 kg		Approx. 0.18 kg		Approx. 0.24 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° ~ 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)	
	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 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.

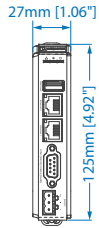
Dimensions

cMT-SVR100 / cMT-SVR102

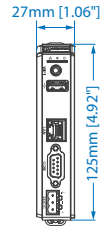
cMT-SVR-200 / cMT-SVR-202

cMT-FHD

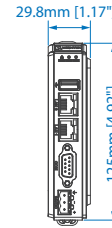
cMT-iM21



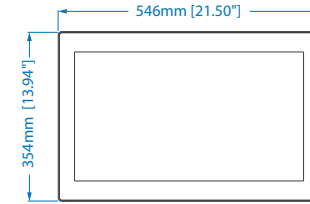
Front View



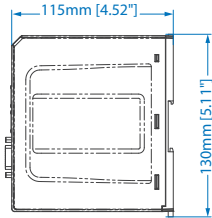
Front View



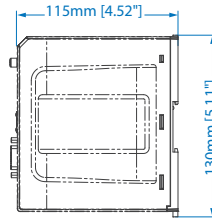
Front View



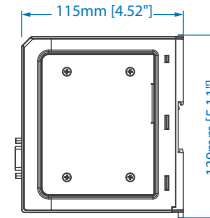
Front View



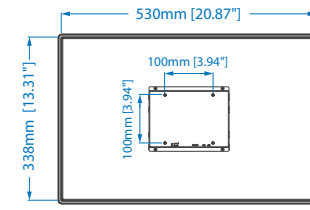
Side View



Side View



Side View



Rear View



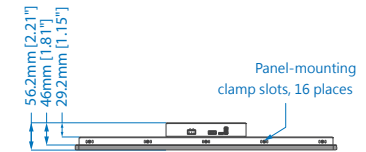
Top View



Top View



Top View



Bottom View



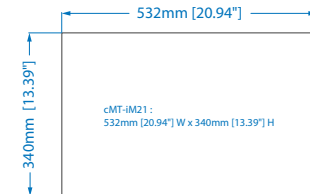
Bottom View



Bottom View



Bottom View



Cutout Dimensions

Specification



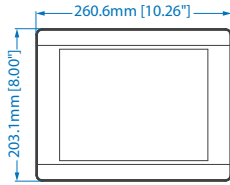
	Model	cMT-iV6	cMT-iPC10	cMT-iPC15
Display	Display	9.7" TFT	9.7" TFT	15" IPS
	Resolution	1024 x 768	1024 x 768	1024 x 768
	Brightness (cd/ m')	350	350	400
	Contrast Ratio	500: 1	500: 1	1000: 1
	Backlight Type	LED	LED	LED
	Backlight Life Time	> 30,000 hrs.	> 30,000 hrs.	> 50,000 hrs.
	Colors	262K	262K	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)	0.129 (H) x 0.129 (V)	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
	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.

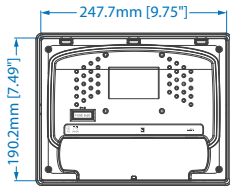
* Intel Atom is a trademark of Intel Corporation or its subsidiaries in the U.S. and/or other countries.

Dimensions

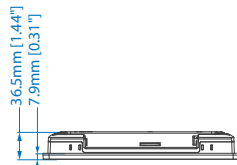
cMT-iV6



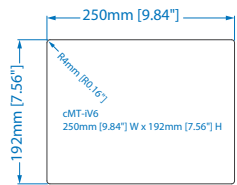
Front View



Rear View

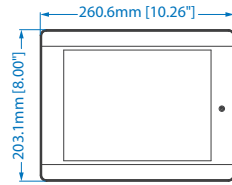


Bottom View

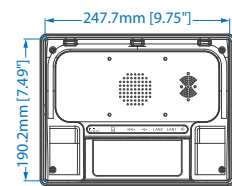


Cutout Dimensions

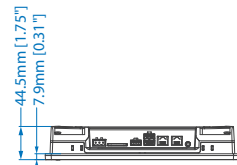
cMT-iPC10



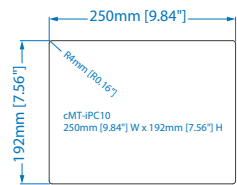
Front View



Rear View

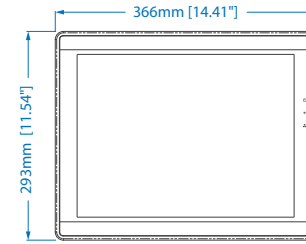


Bottom View

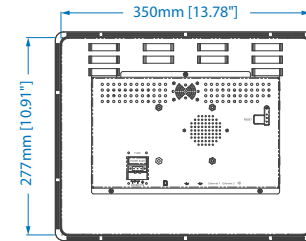


Cutout Dimensions

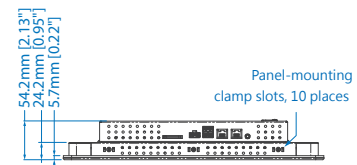
cMT-iPC15



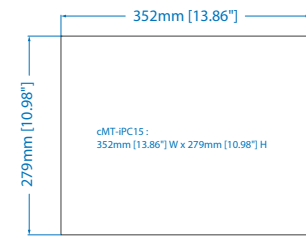
Front View



Rear View



Bottom View



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 Logic to Field power : Isolation	Isolated CANopen : Yes Isolated power : Yes	Network to Logic : Isolation Logic to Field power : Isolation
Specification	Back-up Fuse	≤ 1.6A Self-recovery	≤ 1.6A Self-recovery	≤ 1.6A Self-recovery
	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
Environment	Mount	35mm DIN rail mounting	35mm DIN rail mounting	35mm DIN rail mounting
	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

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					
	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					

Analog Input/Output Specifications



Model		iR-AI04-VI	iR-AM06-VI	iR-AQ04-VI
Number of Analog Inputs		4 ($\pm 10V/ \pm 20mA$)	4 ($\pm 10V/ \pm 20mA$)	0
Number of Analog outputs		0	2 ($\pm 10V/ \pm 20mA$)	4 ($\pm 10V/ \pm 20mA$)
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		
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 Specification		24 VDC(20.4 VDC~28.8 VDC) (-15%~+20%)
	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



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 K Ω	-
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
Specification	Number of Axis	1- Axis	
	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 cMT-G01 / cMT-G02 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		●				
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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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