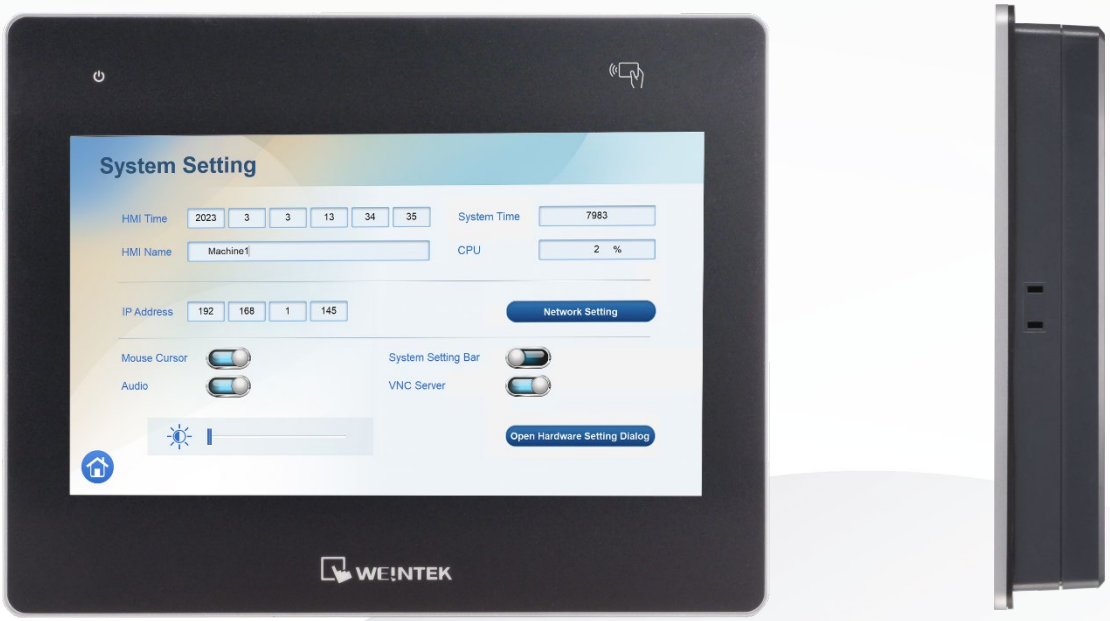
cMT3102X (R)

10.1” WVA Advanced HMI



IP66 NEMA4

Key Features

- Compatible with M02 WiFi Expansion Module that supports wireless communication
- Built-in RFID
- 10.1" 1024 × 600 LCD
- COM port × 3, Ethernet port × 2, USB host port × 1
- Resistive touch panel
- Built-in 4 GB FLASH and 1 GB RAM
- Fan-less cooling system

Technical Specifications

Display

Display	10.1” Wide Viewing Angle (WVA)
Resolution	1024 × 600
Brightness (cd/m^2)	350
Contrast Ratio	1000:1
Backlight Life Time	> 50,000 hrs.
Colors	16.7 M
LCD Viewing Angle (T/B/L/R)	89/89/89/89
Pixel Pitch (mm)	0.2175 (H) × 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

CPU	Quad-core RISC

I/O Port

Memory Card Type	N/A
USB Host	USB 2.0 × 1
Ethernet	LAN 1: 10/100/1000 Base-T × 1 LAN 2: 10/100 Base-T × 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*
WiFi	M02 WiFi Expansion Module (Optional)
RS-485 Dual Isolation	N/A
CAN Bus	Yes
Audio Output	N/A

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

RFID

Compatibility Standard	ISO/IEC 14443 Type A/B, Frequency: 13.56 MHz
Reading Distance	Max. 4 cm*

* RFID reading distance depends on tag size and antenna design.

Power

Input Power	24 ± 20 % VDC
Power Isolation	Built-in
Power Consumption	1 A @ 24 VDC
Voltage Resistance	500 VAC (1 min.)
Isolation Resistance	Exceed 50 MΩ at 500 VDC

Mechanical

Enclosure	Plastic
Dimensions W×H×D	271 × 213 × 38 mm
Panel Cutout	260 × 202 mm
Weight	Approx. 1.2 kg
Mount	Panel Mount, VESA Mount 75 × 75 mm

Environment

PCB Coating	Yes
Protection Structure	UL Type 4X (indoor use only) / 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)
Altitude	3,000 m
Vibration Endurance	10 to 25 Hz (X, Y, Z direction 2G 30 minutes)

Certificate

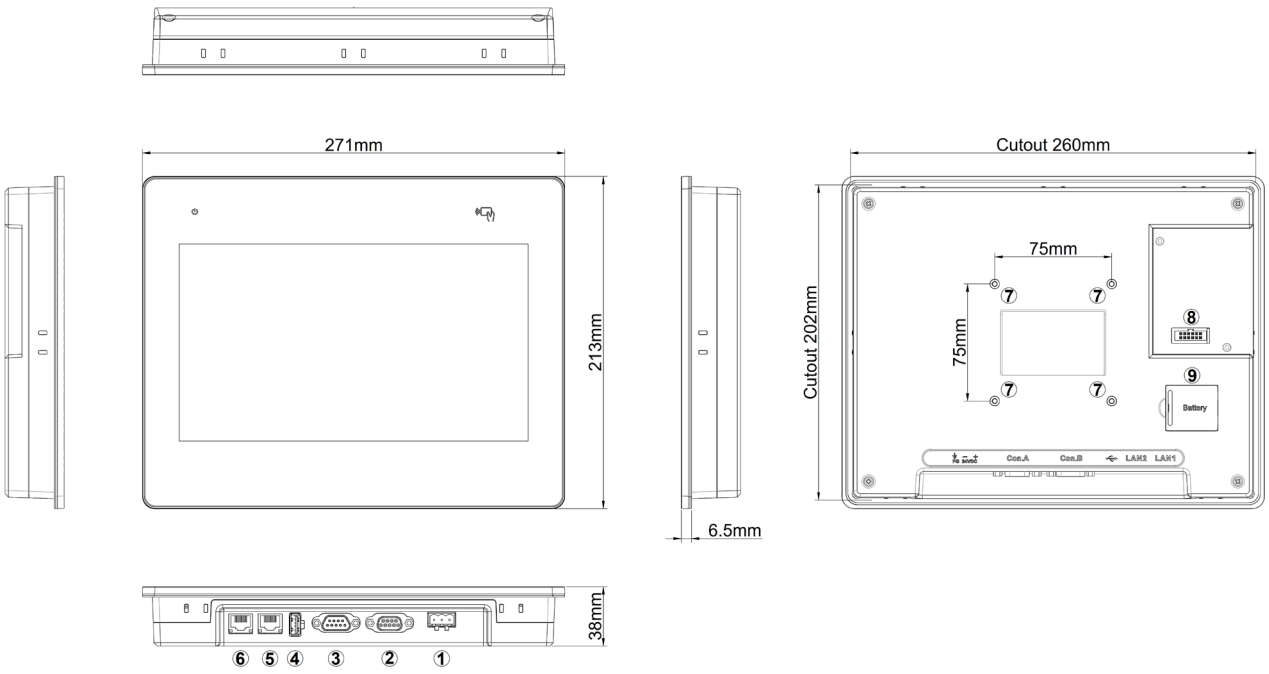
CE	CE Marked
ATEX	ATEX Zone 2/22 Category 3 G/D
UL	cULus Listed

Software

EasyBuilder Pro	V6.09.02 or later versions
Weincloud	EasyAccess 2.0 (Optional), Dashboard (Optional)
CODESYS®	Optional

* CODESYS® is a trademark of CODESYS GmbH.

Dimensions



1	Power Connector
2	Con.A: COM2 RS-485 2W/4W, COM3 RS-485 2W, CAN Bus
3	Con.B: COM1 RS-232 4W, COM3 RS-232 2W
4	USB Host
5	LAN 2
6	LAN 1
7	VESA 75 mm Screw Holes
8	Expansion Module Connector
9	Battery

Pin Assignment

Con.B: 9 Pin, D-sub, Male

PIN#	COM1 [RS232]4W	COM3 [RS232]2W
1		
2	RxD	
3	TxD	
4		
5	GND	
6		
7	RTS	TxD
8	CTS	RxD
9	GND	

Con.A: 9 Pin, D-sub, Female

PIN#	COM2 [RS485]2W	COM2 [RS485]4W	COM3 [RS485]2W	CAN Bus
1	Data-	Rx-		
2	Data+	Rx+		
3		Tx-		
4		Tx+		
5	GND			
6			Data-	
7				CAN_L
8				CAN_H
9			Data+	

Part Number

☐ **【cMT3102X (R)】**

10.1" 1024 × 600 WVA LCD HMI, Built-in 4 GB FLASH / 1 GB RAM

☐ **【RP0C3A300】** (included in package)

10.1” Screen Protective Film

☐ **【RZUSK7010】** (included in package)

USB Clamp & Tying Strap

Optional:

☐ **M02:** WiFi Expansion Module

☐ **RZACEA020:** EasyAccess 2.0 Activation Card

☐ **RZ0CDS000:** CODESYS License