


### 1 Installation and Startup Guide

This document covers the installation of cMT3108XP Series HMI, for the detailed specifications and operation, please refer to Datasheet, Brochure and EasyBuilder Pro User Manual. Please read all warnings, precautions, and instructions on the device carefully before use.

#### Install Environment:

NEMA Rating	The HMI product is NEMA 4 rated, indoor use only.
Electrical Environment	The HMI product has been tested to conform to European CE requirements. This means that the circuitry is designed to resist the effects of electrical noise. This does not guarantee noise immunity in severe cases. Proper wire routing and grounding will insure proper operation.
Environmental Considerations	<ol style="list-style-type: none"> <li>(1) Make sure that the displays are installed correctly and that the operating limits are followed. Avoid installing units in environments where severe mechanical vibration or shocks are present.</li> <li>(2) The HMI product is certified in accordance with ATEX zone 2/22 categories 3 G/D. The unit has to be installed in an additional enclosure ensuring a minimal protection level for 3G/D equipment. The enclosure equipped with the unit has to be certified and shouldn't be opened when an explosive atmosphere is present.</li> <li>(3) Do not install the unit where acid gas, such as SO<sub>2</sub> exists.</li> <li>(4) This device should be mounted in the vertical position and for use on the flat surface enclosure.</li> <li>(5) For use in Pollution Degree 2 Environment and dry location.</li> <li>(6) Relative Humidity: 10% ~ 90% (non-condensing)</li> </ol>
Cleaning Considerations	Clean the device using dry cloths. Do not use liquid or spray detergents for cleaning.
IP Rating	IP 66
 Warning	Protection impairment if used in a manner not specified by the manufacturer. Déficit de protection si utilisé d'une manière non spécifiée par le fabricant.

### 2 Unpacking the Unit

Unpack and check the delivery. If damage is found, please contact the supplier.

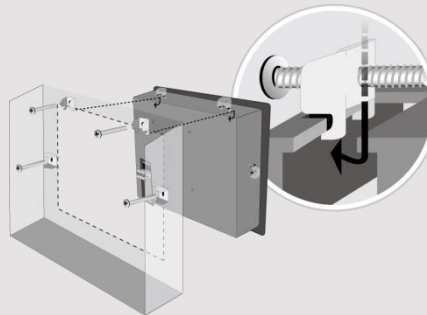
**NOTE: Place the operator panel on a stable surface during installation. Dropping it or letting it fall may cause damage.**

The package includes:

- (1) Installation Instruction, 2-sided A4 \*1
- (2) Human Machine Interface \*1
- (3) Power Connector \*1
- (4) Brackets & Screws \*1 pack
- (5) USB Stick Clamp & Tying Strap \*1

### 3 Installation Instructions

Use a control box that provides enough stiffness. Cutout Dimension: 255 mm x 185 mm. Secure the operator panel in position, using all the fastening holes and the provided brackets and screws. Screw Torque: 2.6 ~ 3.9 lbf.in. (For reaching waterproof effect and preventing the panel from being deformed.)



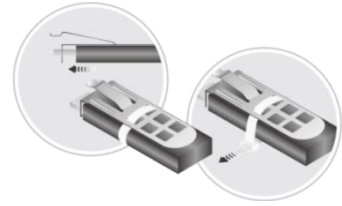
Plan for adequate space around the unit to dissipate the heat from other devices inside the enclosure.  
Maximum operating temperature: 55°C

Minimum required clearances (along the panel):  
Maximum panel thickness: 4 mm

#### USB Stick Clamp Usage

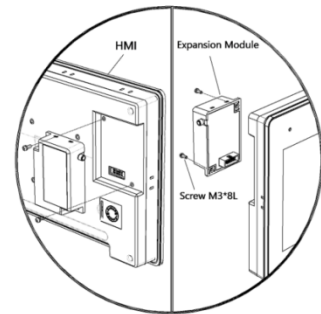
Combining the USB Stick with the clamp can protect the USB connector with HMI when strong vibration is present.

1. Insert the USB connector to the clamp.
2. Press the spring and insert the USB stick.



#### Expansion Module and Magnetic Mounting

1. Connect the expansion module by inserting it into the HMI's rear panel.
  2. Tighten the module to HMI's rear panel.
  3. Lock the antenna's SMA connector.
- Please reserve space for installing the expansion module in order to prevent physical damage to the HMI.



### 4 Power Connections


Power Connector Specifications:  
Wire AWG: 24~12  
Wiring Conductor Minimum Temperature: -40°C  
Screw Torque: 4.5 lbf-in (max.)  
Copper conduct only.



#### NOTE:

1. Connect positive DC line to the '+' terminal.
2. When downloading project using EasyBuilder Pro with PLC and PC simultaneously, the power supply must be turned off to prevent damage to HMI or PC.

## 5 System Settings

When HMI is powered up and displays image, press the round Start Button in the upper-left corner of the screen to open the Setting dialog box. Tap the lock icon  and log in. (Default System Password: 111111)

Go to the Network tab, and setup your network.

In Setting dialog box you can see device information, configure general settings, set HMI Time/Date/Name, and more.



## 6 EasyBuilder Pro Software Settings

Launch EasyBuilder Pro software, select your project file, press F7 shortcut key to open the download dialog box: Select Ethernet > IP tab > Enter your HMI IP > Click Download to download this project file to HMI.

Using screensaver and backlight saver is recommended in order to avoid image persistence caused by displaying the same image on HMI for a long time.

(Please refer to EasyBuilder Pro User Manual for software operation details.)

## 7 Communication Connections

NOTE:

1. Only Tx & Rx (no RTS/CTS) may be used for COM1 RS232 when COM3 RS-232 is also used.
2. COM2 and COM3 RS-485 2W support MPI 187.5K, please use one at a time.

1 2 3 4 5  
6 7 8 9

Con.B

COM1/COM3 [RS232] 9 Pin, Male, D-sub

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

5 4 3 2 1  
9 8 7 6

Con.A

COM2/COM3 [RS485]/CAN Bus 9 Pin, Female, D-sub

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+	

## 8 Restore Factory Default

Follow Step 5 to open the Setting dialog box. Go to "Reset options" tab, press the button of "Reset HMI to default". An Attention window shows, enter "yes".

Another way to restore factory default is entering "default111111" when logging in. An Attention window shows, enter "yes".

Please note that the projects and data stored in the unit are all cleared after restoring factory default.

## 9 Battery Replacement

Battery Specification: Type CR2032, Rated 3V

Battery replacement shall be performed by qualified personnel (engineer) only and care must be taken when handling lithium batteries. For more information on battery replacement and disposal considerations, please refer to the following link:

[http://www.weintek.com/download/MT8000/eng/FAQ/FAQ\\_103\\_Replace\\_Battery\\_en.pdf](http://www.weintek.com/download/MT8000/eng/FAQ/FAQ_103_Replace_Battery_en.pdf)

### CAUTION


 Power

**NOTE:** Make sure you are properly installing the unit.

Use power output powered by DC power supply systems. The power supply. The peak current is 1.5A.

 Fusing Requirements


If the display does not power on, it will protect against overcurrent of time. Check wiring.

 High Voltage

A resettable fuse is used for DC voltage source.

 Emergency Stop

A Hard-wired E-Stop is required for ICS Safety Recommendation.


 Supply Voltage Condition

Do not power the unit with an unstable power supply. Note that the power supply must be stable.


 Wire Routing

- a. Power wire length should be as short as possible.
- b. Please use twisted pair wires with impedance matching.
- c. If wiring is to be done in a bundle, use shielded cables.
- d. Keep AC, high voltage, and power supply wires away from signal wires to avoid dissipation. Try to separate them.
- e. Add a resistor to the power supply and the signal line to reduce the dissipation. Try to separate them.

### DANGER

 Hardware Considerations

The system design must be carefully reviewed to thereby create an interface that can lead to physical injury to the user. If you use any product, please take the following potential safety hazards into account. Steps depend on the installation of solid-state relays and the installation of Contactors.

 Programming Considerations

To conform to ICS safety standards, ensure that all wiring is done according to the checks built into the system by the personnel.

## Limited Warranty

This product is limited warranted against defects in materials and workmanship. The proven defective product will be repaired or replaced. This warranty shall not cover any product under the following conditions:  
 (a) Out of warranty period which is 12 months from the date of purchase.  
 (b) Damage caused by Force Majeure, accident, fire, flood, lightning, etc.  
 (c) Product has been repaired or taken apart by unauthorized personnel.  
 (d) Products whose identification markings have been removed or altered.