


1 Installation and Startup Guide

This document covers the installation of cMT2166X 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	(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. (2) Do not operate the unit in areas subject to explosion hazards due to flammable gases, vapors or dusts. (3) Do not install the unit where acid gas, such as SO ₂ exists. (4) This device should be mounted in the vertical position and for use on the flat surface enclosure. (5) For use in Pollution Degree 2 Environment and dry location. (6) Relative Humidity: 10% ~ 90% (non-condensing)
Operating Altitude (Atmospheric Pressure)	Below 3,000 m (9842.52 ft.), atmospheric pressure is 70.1 kPa.
IP rating	IP 66
Cleaning Considerations	Clean the device using dry cloths. Do not use liquid or spray detergents for cleaning.
 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


3 Installation Instructions

Use a control box that provides enough space for the HMI. Cutout Dimension: 384 mm x 247 mm. Mount the operator panel in position, using all the provided holes and the provided brackets and screws. (For real waterproof effect and preventing the panel from being deformed.)

Plan for adequate space around the unit inside the enclosure, for ventilation and cable management. Avoid the heat from other devices inside the enclosure. The ambient temperature around the unit should be 0 ~ 50°C.

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

4 Power Connections

 Power Connector Specifications:
Wire AWG: 24~12
Wiring Conductor Minimum Temperature: 0°C
Screw Torque: 4.5 lbf-in (max.)
Copper conduct only.

NOTE:

1. Connect positive DC line to the '+' terminal and ground to the '-' terminal.
2. When downloading project using EasyBuilder Pro, connect HMI with PLC and PC simultaneously. Potential difference may result in damage.

5 System Settings

When the HMI powers up and displays the main screen, open the Setting page. To configure the system, tap "configure", and a login window will appear. Enter the system password (default: 111111). If the password is correct, and log in to make changes. In the Setting page, tap "system settings", set HMI Time/Date/Name, and so on.

6 EasyBuilder Pro Software

Launch EasyBuilder Pro software, select "HMI" in the dialog box: Select Ethernet > IP tab > "HMI" > "HMI" file to HMI.

Using screensaver and backlight save settings. Tap "screensaver" by displaying the same image on HMI. Tap "backlight" (Please refer to EasyBuilder Pro User Manual).

7 Communication Connections

NOTE:

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

COM1/COM3 [RS485] 9 Pin, Female, D-sub

PIN#	COM1 [RS485]2W	COM1 [RS485]4W	COM3 [RS485]2W
1	Data-	Rx-	
2	Data+	Rx+	
3		Tx-	
4		Tx+	
5	GND		
6			Data-
7			
8			
9			Data+

8 Restore Factory Default

There are two methods to restore factory default, both of which will erase all project files and data stored on the device.

1. Follow the instructions in section 5 of this manual to open the Setting page and select the appropriate page based on the OS version before pressing "Reset HMI to default":
For OS versions 20231201 or later, select the "System Properties" page, press "Reset HMI to Default," and select "Reset".
For OS versions before 20231201, select the "Reset Options" page, press "Reset HMI to default", and enter "yes".
2. Alternatively, perform the operation based on the OS version:
For OS versions 20231201 or later, after pressing "Reset HMI to Default", enter "default111111" or the default password "111111", and then select "Reset".
For OS versions before 20231201, enter "default111111" during login, and then enter "yes".

9 Battery Replacement

Battery replacement shall be performed by qualified personnel 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

CAUTION

 Power

NOTE: Make s
installing the un

Use power output th
powered by DC po
systems. The power
supply. The peak sta

 Fusing Require-
ments


If the display does no
prevent damage if th
and try to power up a

 High Voltage

An Internal fuse will
voltage sources sho

 Emergency Stop

A Hard-wired EMER
ICS Safety Recomm


 Supply Voltage
Condition

Do not power the un
power supply. Note:
power the unit.


 Wire Routing

- a. Power wire leng
- b. Please use twist
impedance matc
- c. If wiring is to be
devices.
- d. Keep AC, high e
- e. Add a resistor an
supply and the f
dissipation. Typi

DANGER

 Hardware
Considerations

The system design
thereby create an
interface can lead
physical injury to the
If you use any prog
potential safety haza
steps depend on y
installation of solid-
installation of Contro

 Programming
Considerations

To conform to ICS
ensure that all writ
checks built into the
personnel.

Limited Warranty

This product is limited warranted ag
The proven defective product will e
This warranty shall not cover any p
(a) Out of warranty period which is 12 month
(b) Damage caused by Force Majeure, accid
(c) Product has been repaired or taken apart
(d) Products whose identification markings h