cMT-iM21 series

Installation Instruction

1 Installation and Startup Guide

This document covers the installation of cMT-iM21, for the detailed specifications and operation, please refer to Datasheet, Brochure and User Manual. Please read all warnings, precautions, and instructions on the device carefully before use.

Install Environment:

Electrical Environment	The cMT-iM21 Series 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 units 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 SO2 exists. (4) This device should be mounted in the vertical position and for use on the flat surface enclosure. (5) Relative Humidity: 10% ~ 90% (non-condensing)
Cleaning Considerations	Clean the device using dry cloths. Do not use liquid or spray detergents for cleaning.
IP rating	IP 65
⚠ 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, notify the supplier.

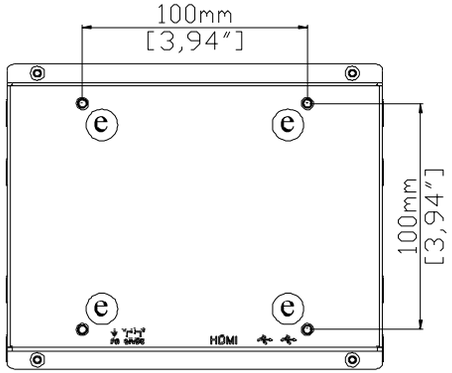
NOTE: Place the unit on a stable surface during installation. Dropping it or letting it fall may cause damage.

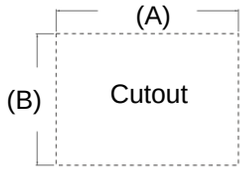
(1) Installation Instruction, 2-sided A4 *1
(2) cMT-iM21 *1
(3) Panel mount kit

3 Installation Instructions

Use a control box that provides enough stiffness. Cutout Dimension: 532 mm x 340 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 and inside the enclosure, for ventilation and cables. Consider the heat from other devices inside the enclosure. The ambient temperature around the unit must be 0 ~ 50°C Minimum required clearances (along the overlay): Top 20 mm / Bottom 20 mm / Sides 20 mm Maximum panel thickness: 3 mm

VESA Mount 100 x 100 (M4 Max. Depth 8mm)

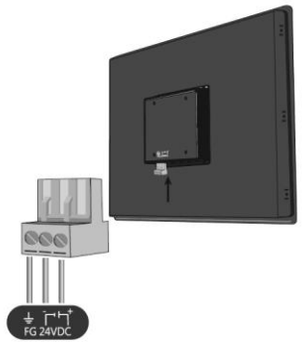




Type	A(mm)	B(mm)
cMT-iM21	532	340

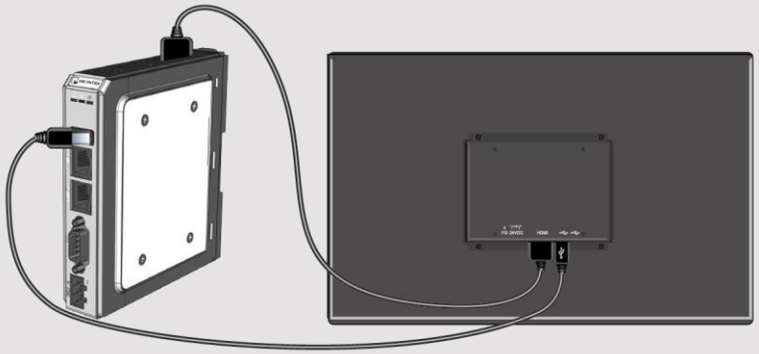
4 Power Connections

NOTE: Connect positive DC line to the '+' terminal and the DC ground to the '-' terminal.



5 System Settings

Connect cMT-iM21 with cMT-FHD using HDMI™ cable for digital signal and USB cable for touch signal
Cable length: <5m
When the cable length needed exceeds 5m, please use a device or cable that can ensure better signal strength.
While cMT-FHD's USB port is occupied by the USB cable used for touch signal, cMT-iM21 offers an additional USB port that can be used for another USB device, and this USB device will work as if being connected to cMT-FHD.



6 Information

After connecting cMT-iM21 with cMT-FHD, open cMT-FHD settings to adjust Brightness.

CAUTION

NOTE: Make sure that all local and national electrical standards are met when installing the unit. Contact your local authorities to determine which codes apply.

Power	Use power output that meets SELV (Safety Extra-Low Voltage) requirements. The unit can be powered by DC power only, voltage range: 24±20% Volts DC, compatible with most controller DC systems. The power conditioning circuitry inside the unit is accomplished by a switching power supply. The peak starting current can be as high as 2A. Power supply: 24V 50W (above).
High Voltage	DC voltage sources should provide proper isolation from main AC power and similar hazards.
Emergency Stop	A Hard-wired EMERGENCY STOP should be fitted in any system using cMT-iM21 to comply with ICS Safety Recommendations.
Supply Voltage Condition	Do not power the unit and inductive DC loads, or input circuitry to the controller, with the same power supply. Note: The 24 VDC output from some controllers may not have enough current to power the unit.
Wire Routing	a. Power wire length should be minimized (Max: 500m shielded, 300m unshielded). b. Please use twisted pair cables for power wire and signal wire and conform to the impedance matching. c. If wiring is to be exposed to lightning or surges, use appropriate surge suppression devices. d. Keep AC, high energy, and rapidly switching DC power wiring separated from signal wires. e. Add a resistor and capacitor in the parallel connection between the ungrounded DC power supply and the frame ground. This provides a path for static and high frequency dissipation. Typical values to use are 1M Ohm and 4700pF.

DANGER

Hardware Considerations	The system designer should be aware that devices in Controller systems could fail and thereby create an unsafe condition. Furthermore, electrical interference in an operator interface can lead to equipment start-up, which could result in property damage and/or physical injury to the operator. If you use any programmable control systems that require an operator, be aware that this potential safety hazard exists and take appropriate precautions. Although the specific design steps depend on your particular application, the following precautions generally apply to installation of solid-state programmable control devices, and conform to the guidelines for installation of Controllers recommended in NEMA ICS 3-304 Control Standards.
Programming Considerations	To conform with ICS Safety Recommendations, checks should be placed in the controller to ensure that all writable registers that control critical parts of plant or machinery have limit checks built into the program, with an out-of-limit safe shut down procedure to ensure safety of personnel.

GMECM2100_cMT_iM21_Installation_181107

Limited Warranty

This product is limited warranted against defects in design and manufacture. The proven defective product will either be repaired or replaced, at Weintek's discretion. This warranty shall not cover any product which is

(a) Out of warranty period which is 12 months from the manufacturing month of the HMI products.
(b) Damage caused by Force Majeure, accident, negligence, improper installation or misuse.
(c) Product has been repaired or taken apart by unauthorized technicians.
(d) Products whose identification markings have been removed or damaged.