

12 inch B Series HMI Installation Guide

Thank you for purchasing HMI. Before installing or operating the unit, please read this installation guide carefully to ensure correct use.

1. Safety Precautions (Read these precautions before use.)

1.1 General

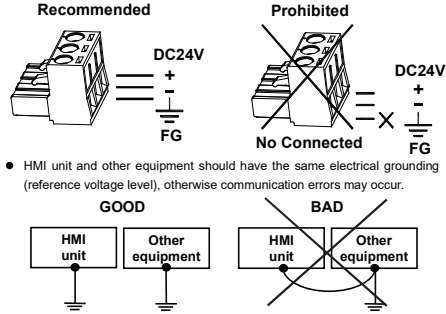
- Unpack and check the delivery for transportation damage. If any damage or deformation is found, please notify the supplier.
- The supplier is not responsible for the disassembled, altered or modified device.
- Never allow fluid or any conductive particles to enter into the HMI. Otherwise, it may damage the HMI, cause fire or malfunction.
- Only qualified personnel may install the HMI, perform maintenance and inspection.
- The liquid crystal inside the LCD panel is a hazardous substance. If the panel is damaged, avoid contact with the leaked liquid crystal. If the liquid crystal spills on clothing or skin, use soap and wash off thoroughly. In case of eye contact with the liquid, hold the eye open, flush with plenty water and get medical attention as soon as possible.
- Do not touch any terminals while the power is on. Otherwise, it may cause injury due to electrical shock.
- Disconnect the power supply before installing the HMI, do wiring operation, perform maintenance or inspection. Otherwise, it may cause damage or electrical shock.

1.2 Installation

- The installation may be carried out by qualified personnel only.
- Install the HMI according to the installation procedures.
- Check the power source voltage is within the specified range and the polarity is correct before connecting the HMI.
- Keep signal and power supply cables away from high-voltage, large-current carrying cables.

Caution	Please use solid wires between 22AWG and 14AWG. Maximum 300V and rated temperature to 105°C for input power pins.
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Caution	Make sure the HMI is properly grounded to prevent electrical shock, fire or malfunction.
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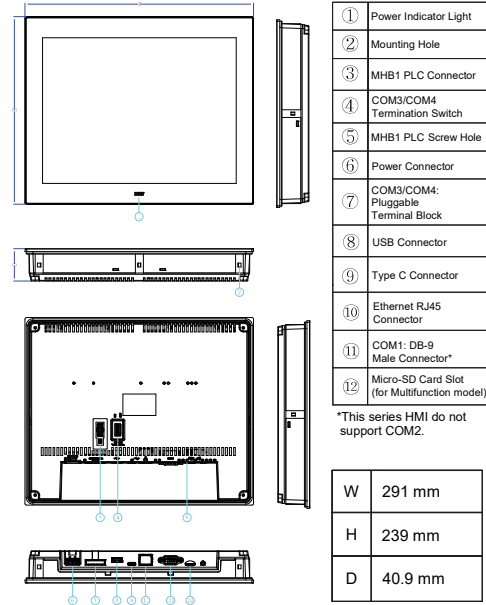
1.3 Operation

- Do not use sharp objects or excessive force to press the touch screen. This may damage the touch screen. Screen protector can be applied to the HMI screen to protect it from damage, for ordering information, please contact our sales department.
- Do not use the output signal of the device as any safety function or system emergency stop. It may result in personal injury or equipment damage if a malfunction of the touch occurs.

1.4 Maintenance and Service

- The agreed guarantee applies.
- Only qualified personnel should make repairs and perform maintenance.
- Disconnect the device from the power supply before carrying out cleaning or maintenance.
- Clean the front panel with a soft cloth and mild detergent.
- Please use original replacement spare parts or accessories.

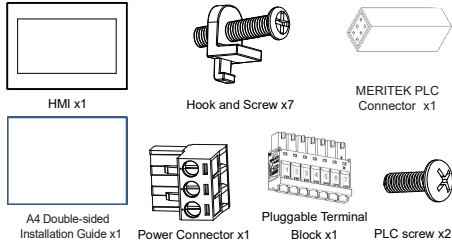
2. Part Names and Dimensions



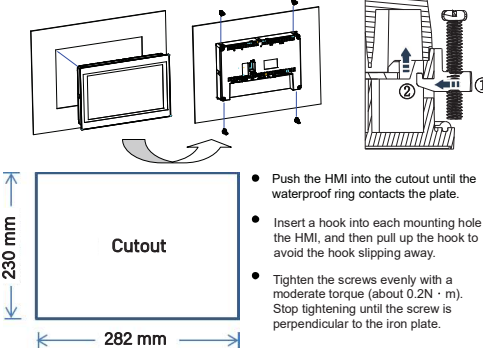
3. Specifications

Model	10.1" Multifunction model
Type of item tested	Control
Product Description	Operator Panel
Connections to mains supply	Permanent
Overvoltage category	II
Pollution degree	2
Means of Protection	Class III
Environmental conditions	Operating Temp. 0~50°C Storage Temp. -20~60°C
For use in wet locations	No
Equipment mobility	Built in
Operating conditions	Continuous
Overall size	291 x 239 x 40.9 (mm)
Weight	1450 (g)
Marked degree of protection	Front panel: IP65 / Rear Case: IP20 to IEC 60529
Equipment classification	Industrial, Professional, Commercial
Equipment class	Class III
Equipment type	Permanently connected, Fixed
Serial 1	Connector: D-Sub 9-Pin COM1: RS-232(TXD,RXD)
Serial 2	Connector: Pluggable Terminal Block COM3: RS-422/485 COM4: RS-485
LAN	10M/100M
USB	USB2.0 Type-A (Host)x1 USB2.0 Type-C (Device)x1(No supply power)
Micro SD	Yes
Audio	---
PLC Extension	MHB1 main units + MB1 extension modules
Termination Switch	Yes (For RS-422/485)
Power	14V-32V Power Input Consumption 625mA@24VDC Insulation 50MΩ at 500VDC
Environment	Relative Humidity 10%~90%@ 40°C (non-condensing) Withstand Voltage AC500V/20mA/1 Min. (between charger & FG terminals) 5 to 9Hz Half-amplitude: 3.5mm 9 to 150 Hz Constant acceleration: 19.6m/s ² (2G) 3 directions of X, Y, Z: 10times (IEC61131-2 complaints) Noise Suppression 1000V/p-p, width 1us, rising time 1ns Grounding Resistance Below 100Ω
Dimension	Cut-out 282 x 230 (mm)

4. Unpacking the Unit

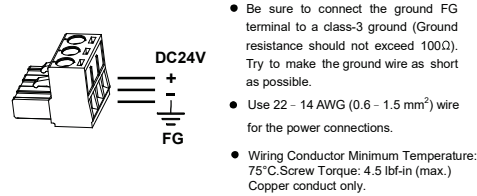


5. Installation Procedure



Caution	Do not lock too tightly when using fixing screws to avoid other problems.
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6. Power Connection

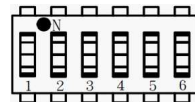


7. Termination Switch

- 12 inch HMI has a built-in termination resistor switch. To enable or disable the termination resistor please follow the configuration shown in the table below. The termination switch is for COM3 [RS-422 / RS-485] and COM4 [RS-485].

- Configuration of Termination Resistor Switch.

No.	Terminating Resistor					
	COM3 [RS-422]		COM3 [RS-485]		COM4 [RS-485]	
	Enable	Disable	Enable	Disable	Enable	Disable
1	OFF	OFF	OFF	OFF	ON	OFF
2	OFF	OFF	OFF	OFF	ON	OFF
3	ON	OFF	ON	OFF	OFF	OFF
4	ON	OFF	ON	OFF	OFF	OFF
5	ON	OFF	OFF	OFF	OFF	OFF
6	ON	OFF	OFF	OFF	OFF	OFF



8. Pin-out of COM Ports

- This series HMI do not support COM2.

DB-9 Male Connector	
PIN#	COM1 [RS-232]
1	NC*
2	RX
3	TX
4	NC
5	GND
6	NC
7	NC
8	NC
9	NC

*1 NC: No Connection

Pluggable Terminal Block			
PIN#	COM3 [RS-422]	COM3 [RS-485]	COM4 [RS-485]
1	NC	NC	DATA+
2	NC	NC	DATA-
3	GND	GND	GND
4	RX+	NC	NC
5	RX-	NC	NC
6	TX+	DATA+	NC
7	TX-	DATA-	NC

9. PLC Extension Tips

- For compact size and saving space, using MHB1 main units + MB1 extension modules is recommended.
- To connect PLC main unit, first use the PLC connector to connect the main unit and then insert into the MHB1 connector hole on the back cover of the HMI to complete the connection.
- MHB1 is fixed with M3 screws in the accessory package.

