

15Inch 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.)

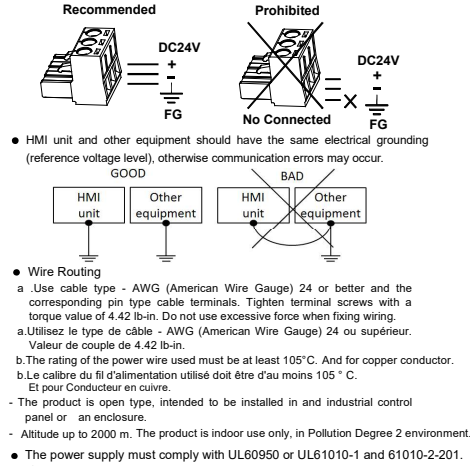
1.1 General

- 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 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 Make sure the HMI is properly grounded to prevent electrical shock, fire or malfunction.



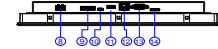
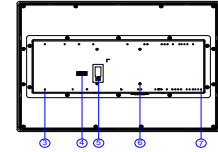
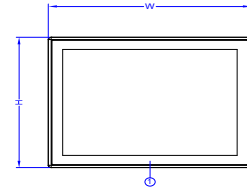
1.3 Operation

- Do not use sharp objects or excessive force to press the touch screen. This may damage the touch screen.
- 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



①	Power Indicator Light
②	Mounting Hole
③	Ground Screw Hole (M4)
④	COM3/COM4 Termination Switch
⑤	Expansion Module Connector
⑥	VEESA Screw Hole (M4)
⑦	MHB1 PLC Screw Hole (M3)
⑧	Power Connector
⑨	COM3/COM4: Pluggable Terminal Block
⑩	USB Type-C Connector
⑪	USB Connector
⑫	Ethernet RJ45 Connector
⑬	COM1: DB-9 Male Connector*
⑭	Micro-SD Card Slot

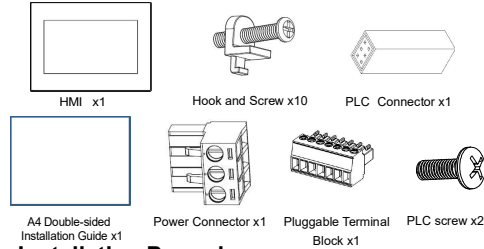
*This series HMI do not support COM2.

W	357 mm
H	283 mm
D	52.5 mm

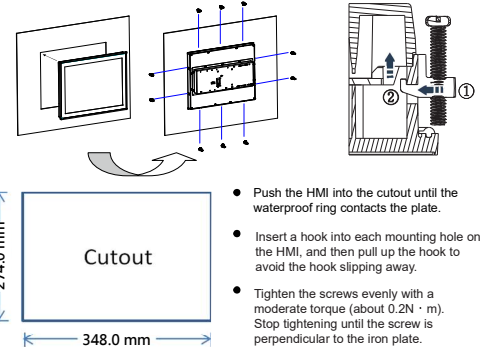
3. Specifications

Model	15" 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	357 x 283 x 52.5 (mm)
Weight	3165 (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 (4W)
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
PLC Extension	MHB1 main units + MB1 extension modules
Termination Switch	Yes (For RS-422/485)
Power input	14-32VDC
Consumption	833mA@20W
Insulation	50MO at 500VDC
Relative Humidity	10%~90% @ 40°C (non-condensing)
Withstand Voltage	ACS00V/20mA/1 Min. (between charger & FG terminals) 5 to 9Hz Half-amplitude: 3.5mm 9 to 150 Hz Constant acceleration: 19.6m/s² (2G) 3 directions of X, Y, Z: 10times (IEC61131-2 complaints)
Vibration	1000Vp-p, width 1us, rising time 1ns
Noise Suppression	Below 100C
Grounding Resistance	Below 100C
Cut-out	348 x 274 (mm)

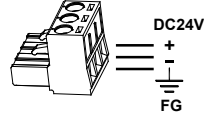
4. Unpacking the Unit



5. Installation Procedures



6. Power Connection

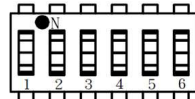


- Be sure to connect the ground FG terminal to a class-3 ground (Ground resistance should not exceed 100Ω). Try to make the ground wire as short as possible.
- Use 24 - 12 AWG (0.201 - 3.24 mm²) wire for the power connections.
- Wiring Conductor Minimum Temperature: 75°C. Screw Torque: 4.5 lb-in (max.) Copper conduct only.

7. Termination Switch

- 15 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].

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



8. Pin-out of COM Ports

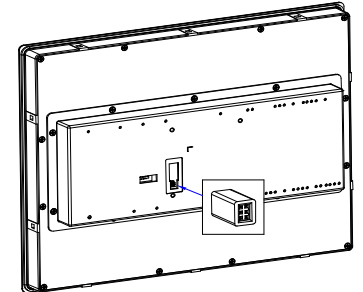
DB-9 Male Connector	
PIN#	COM1 [RS-232]
1	-
2	RX
3	TX
4	-
5	GND
6	-
7	RTS
8	CTS
9	-

*1 NC: No Connection

Pluggable Terminal Block			
T1	T2	T3	T4
T5	T6	T7	T8
PIN#	COM3 [RS-422]	COM3 [RS-485]	COM4 [RS-485]
1	-	-	DATA+
2	-	-	DATA-
3	GND	GND	GND
4	RX+	-	-
5	RX-	-	-
6	TX+	DATA+	-
7	TX-	DATA-	-

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.



Caution Do not overtighten the screws to avoid causing any damage.