



**EC series**

**Easy use Easy read**



## **Warning**

- To prevent electrical shock or equipment damage, unplug the EC207 unit's power cord from the power supply prior to installing or wiring the EC207.
- After completing any EC207 wiring work, be sure the terminal block's protective plastic cover is reattached. If this cover is not reattached, an electrical shock could easily occur.
- To prevent an electric shock be sure to disconnect your EC207 unit's power cord from the power supply before wiring the EC207.
- Do not use voltage beyond the EC207 unit's specified range. Doing so may cause a fire or an electric shock.
- The cables connected to the EC207 should be secured by cable clamps to prevent weight or tension of the cables added to the connectors or terminals.
- The EC207 unit's wiring should be checked to confirm that both the operating voltage and wiring terminal locations are correct. If either the voltage or the wiring terminal location is incorrect, it can cause a fire or accident.
- Do not connect or disconnect Host and EC207 unit communication cables while the EC207 is turned ON.
- Do not replace the EC207 unit's battery yourself. The EC207 uses a lithium battery for backing up its internal clock data and the battery may explode if it is replaced incorrectly. When replacement is required, please contact your local EC207 distributor.

- To prevent a EC207 unit malfunction due to excessive noise, isolate all EC207 input/output signal lines from all power wiring or power cables via a separate wiring duct.
- Be sure all cable connectors are securely attached to the EC207 unit. A loose connection may cause incorrect input or output signals.
- Be sure to ground the EC207 unit's FG wire separately from other equipment FG lines. Also, be sure to use a grounding resistance of 100. or less and a 2mm<sup>2</sup> or thicker wire, or your country's applicable standard. Otherwise, electric shock or malfunctions may result.
- Be sure to use only the designated torque to tighten the EC207 unit's terminal block screws. If these screws are not tightened firmly, it may cause a short-circuit, fire or incorrect unit operation.
- Be sure that metal particles and wiring debris do not fall inside the EC207 unit. They can cause a fire, malfunction or incorrect unit operation.
- Be sure to read the EC207 unit's manual carefully before performing program changes, entering forced output, or using the RUN, STOP, or PAUSE commands while the EC207 is operating. Mistakes made when using these items can cause machine accidents or damage.

# I. Specifications

## General Specifications

Item		EC207-CT-00	EC207-CT-11
Display section	Display color	64K colors	
	Screen type	TFT LCD	
	Screen size	7	
	Resolution W x H (dots)	800x 480	
	Display angle (Vertical)	- 70° to + 50°	
	Display angle(Horizontal)	- 70° to + 70°	
	Intensity of LCD only (cd/m2)	300	
	Back light off automatically	Always ON, Random Setting	
	Backlight	LED (Life approx. 30000h / 25°C)	
Touch panel	Touch Control Panel	4-wire resistive	
	Type	Analog Resistance Film Type	
	Touch Resolution	2mm and above	
	Life	1 million times Min	
	Hardness of surface	4H	
	The Number of Switch Can Be Set (Number/Screen)	960(40X24)	
Text	TrueType Font Support Unicode		

## Interface Specifications

Interface	Serial COM Port	COM1/COM2 (RS-232C / RS422/RS485), COM3(RS-232C), Ethernet 1. COM1、COM2 and COM3 port Baud Rate、Data Length、Parity and Stop Bit can be set on the HMI. 2. COM1、COM2 及 COM3 three types of communication ports that can be used simultaneously. 3. Supporting various brands'PLC models as well as Shihlin inverters、Shihlin thermostats and Shihlin SERVO. 4. RS-485 When selecting MODBUS communication, as many as 31 sets can be connected by setting the station number from 1 to 31. 5. Communicated with PLC via Ethernet. ※(1) 6. COM1(RS-232C) can be connected with the Barcode Scanner.
	Data transfer (PC - HMI)	USB, Ethernet : Project data upload/download ,OS installation. ※(2)
	Several HMI connection	Ethernet. ※(2)
Memory Expansion ※(3)	SD Card and USB	

(1) 『Ethernet Multifunctional』 support for Mitsubishi FX3U-ENET and QJ71E71-100 module.

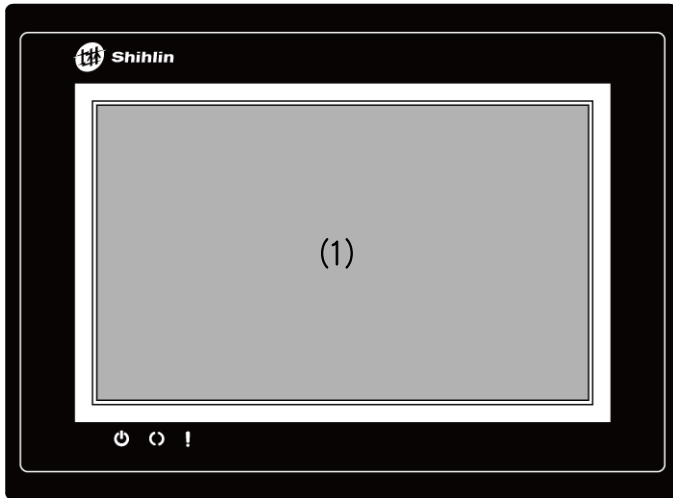
(2) 『Ethernet Multifunctional』 support for Ethernet port.

(3) SD Card Maximum 16G SDHC Support.  
USB Maximum 16G Support.

## General Specifications




Power	Input Voltage	DC 24V
	Rated Voltage	DC 24V ± 10%
	Range for Instantaneous Stop	Within 10ms
	Power Consumption	15W(Max)
Physical	Operating Ambient Temp.	0°C ~ 45°C
	Storage Ambient Temp.	-20°C ~ 60°C
	Operating Ambient Humidity	10%~85%RH (An Environment without Condensation)
	Environmental Tolerance	Non-corrosive Environment; Non-conductive Environmen
	Vibration Resistance	IEC 61131-2 Compliant , Vibration frequency : 5~150Hz , Acceleration : 9.8m/s <sup>2</sup> (1.0G) , X , Y , Z directions for 12 times
	Noise Resistance	Compliant with IEC61000-6-2 : 2001
Installation	Grounding	D Class Grounding
	Water Resistance	Front: IP65 (Dust-proof/Anti-drop Design); Back: IP20
	Cooling Method	Natural Cooling
	Weight	0.85kg
	Exterior Dimensions W×H×D(mm)	200x146x42.5
	Hole-cutting Size (mm)	192x138

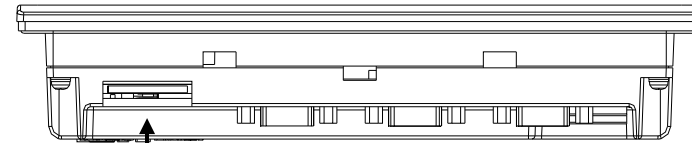
## II、 Part Names



(2)

Front :

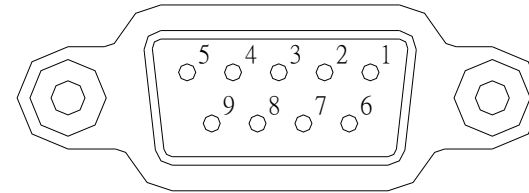
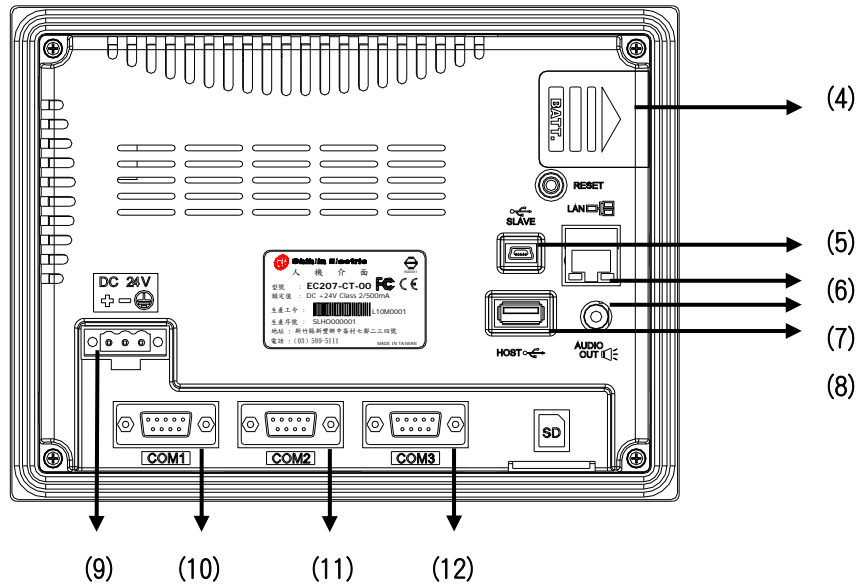
No	Name	Description
1	Display screen	Displays the Utility and the user creation screen.
2	LED	 Power LED : When power is turned on.
		 Run LED : Screen run.
		 Alarm LED : Communication Error.



(3)

Bottom :

No	Name	Description
3	SD card interface	For installing SD card



PIN definition of serial communication :

PIN NO.	COM1	COM2	COM3
1	TX+ / A	TX+ / A	-
2	TX	TX	TX
3	RX	RX	RX
4	RX+	RX+	-
5	GND	GND	GND
6	RX-	RX-	-
7	RTS	-	RTS
8	CTS	-	CTS
9	TX- / B	TX- / B	-

RS-232 : TX/RX/CTS/RTS/GND

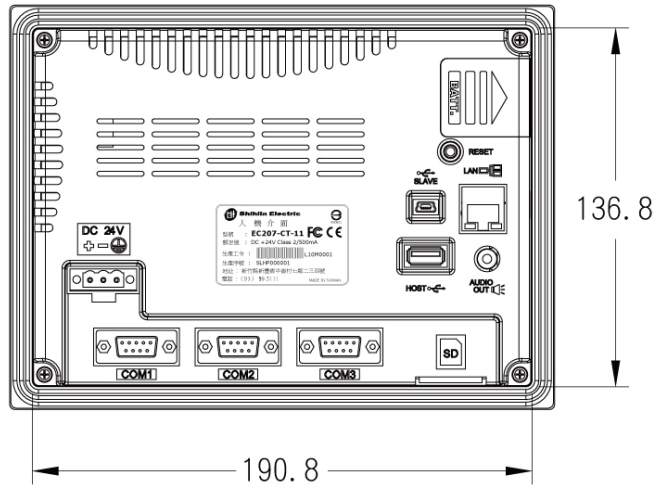
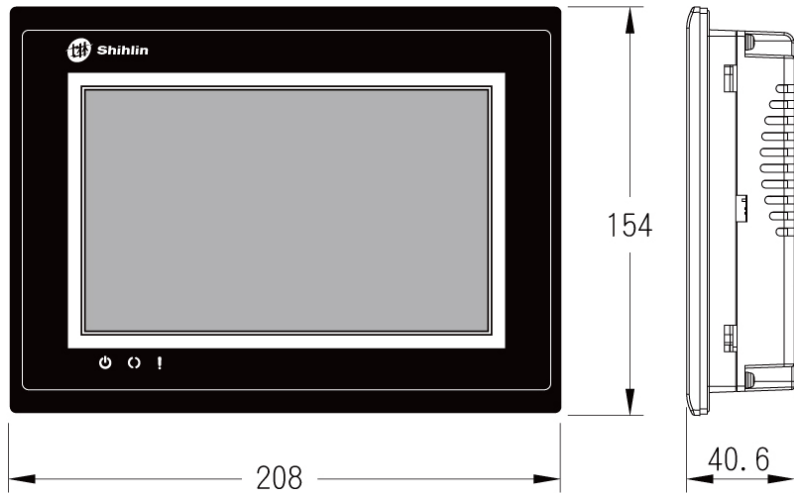
RS-422 : TX+/TX-/RX+/RX-

RS-485 : A/B

Back :

No	Name	Description
4	Battery Holder	Houses the Battery
5	USB Device interface	For connecting a PC.
6	Ethernet interface	The Ethernet transmission interface
7	Sound interface	Sound output , support for Sound play
8	USB Host interface	For installing USB storage Device
9	Power terminal	DC24V
10	COM1	RS232C / RS422 / RS485
11	COM2	RS232C / RS422 / RS485
12	COM3	RS232C


### III、External Dimensions





#### NOTE

- ◆ Depending on the type of connection cable used the dimensions shown above will change. The dimensions given here are representative values and are intended for reference only.


### IV、EU200 Series Model Name Indication



**Shihlin Electric**  
Human Machine Interface

MODE : **EC207-CT-00**  

INPUT : DC +24V /500mA

MFG. NO :  L10M0001

SERIAL NO : SLHO000001

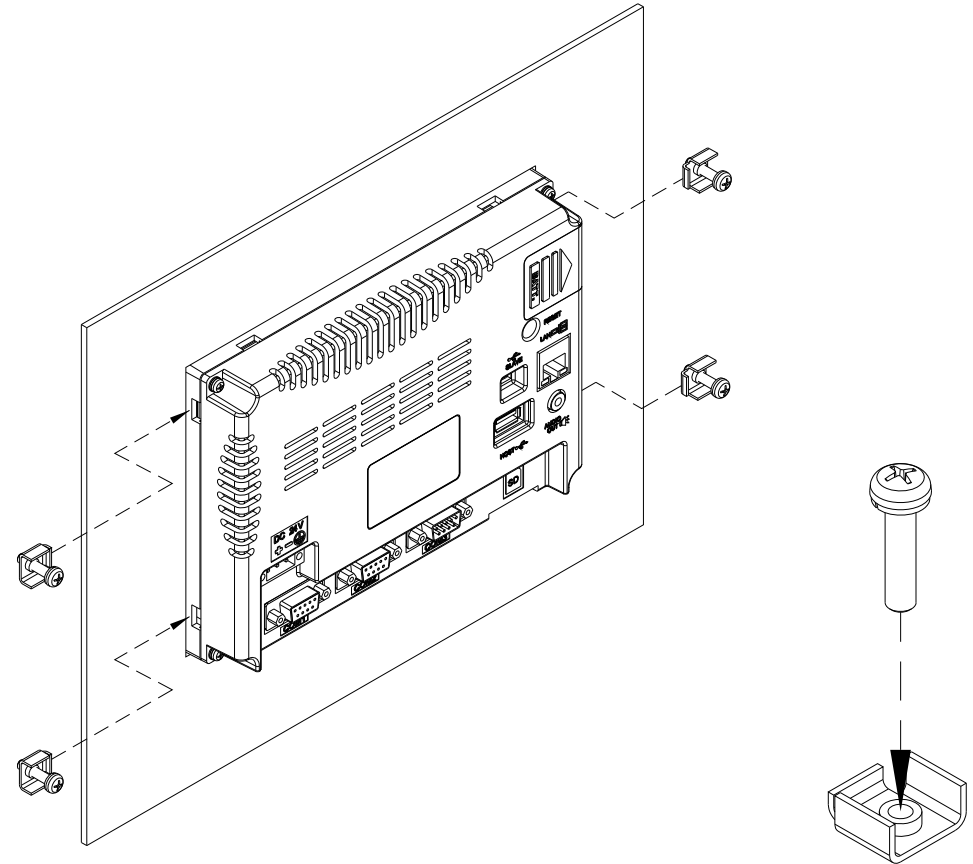
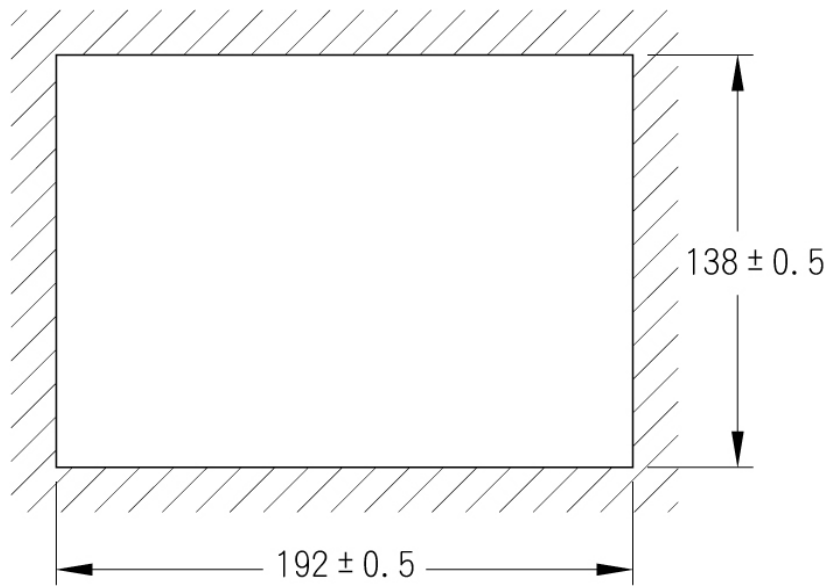
MADE IN TAIWAN

**EC207 - CT - 00**  
(1) (2) (3) (4)

NO	Description
1	EC200 series
2	7"Display Screen size
3	Colors TFT LCD
4	00 : Standard Type 11 : High-Performance Type

## V \ Installation

Make an installation hole on the control panel the dimensions shown below.(Unit: mm)



◆ Max torque:0.3 Nm (2.65 lb-in).

