

### 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 2mm² 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 usingthese items can cause machine accidents or damage.

# I. Specifications

## **General Specifications**

	Item	EC207-CT-00	EC207-CT-11
	Display color	64K colors	
	Screen type	TFT LCD	
	Screen size	7	
	Resolution W x H	800× 480	
_	(dots)	OUUX	. 400
Display section	Display angle (Vertical)	- 70° to + 50°	
ay so	Display	- 70° to	. 70°
ispl	angle(Horizontal)	- 70 10	+ 70
Ä	Intensity of LCD only	30	00
	(cd/m2)	30	JO
	Back light off	Always ON, Random Setting	
	automatically		
	Backlight	LED (Life approx. 30000h / 25°ℂ)	
	Touch Control Panel	4-wire r	esistive
	Type	Analog Resista	ance Film Type
<u>@</u>	Touch Resolution	2mm and above	
pan	Life	Life 1 million times Min	
Touch panel	Hardness of surface	4	Н
12	The Number of Switch		
	Can Be Set	960(4	0X24)
	(Number/Screen)		
	Text	TrueTy	pe Font
	TOX	Support Unicode	

#### Interface Specifications

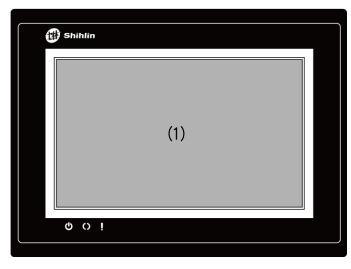
	errace Specifications			
		COM1/COM2 (RS-232C / RS422/RS485),COM3(RS-232C),		
		Ethernet		
		1. COM1 √ COM2 and COM3 port Baud Rate √ Data		
	Serial COM Port	Length · Parity and Stop Bit can be set on the HMI.		
		2. COM1 ⋅ COM2 及 COM3 three types of communication		
		ports that can be used simultaneously.		
		3. Supporting various brands'PLC models as well as		
		Shihlin inverters · Shihlin thermostats and Shihlin		
ce		SERVO.		
Interface		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	USB, Ethernet: Project data upload/download, OS		
	(PC - HMI)	installation. %(2)		
	Several HMI	Ethernet. %(2)		
	connection	Ethernet. %(2)		
Memory Expansion %(3)		SD Card and USB		

- (1) Fethernet Multifunctional support for Mitsubishi FX3U-ENET and QJ71E71-100 module.
- (2) Fethernet Multifunctional support for Ethernet port.
- (3) SD Card Maximum 16G SDHC Support.
  USB Maximum 16G Support.

## General Specifications

Rated Voltage  Range for   Within 10ms    Range for   Storage Ambient   Temp.    Operating Ambient   Tolerance   Non-corrosive Environment without Condensation)    Environmental   Tolerance   IEC 61131-2 Compliant · Vibration frequency : 5~150Hz    Acceleration : 9.8m/s2(1.0G) · X · Y · Z directions for 1    The standard of		Input Voltage	DC 24V	
Instantaneous Stop		Rated Voltage	DC 24V ± 10%	
Instantaneous Stop	owe	Range for	Within 10ms	
Operating Ambient Temp.  Storage Ambient Temp.  Operating Ambient Humidity  Environmental Tolerance  Vibration Resistance  Noise Resistance  Noise Resistance  Operating Ambient Humidity  Environmental Tolerance  Vibration Resistance  Noise Resistance  Noise Resistance  Compliant with IEC61000-6-2: 2001  Grounding  Water Resistance  Front: IP65 (Dust-proof/Anti-drop Design); Back: IP20  Cooling Method  Natural Cooling	_	Instantaneous Stop		
Temp.  Storage Ambient Temp.  Operating Ambient Humidity  Environmental Tolerance  Vibration Resistance  Noise Resistance  Noise Resistance  Grounding  Water Resistance  Temp.  10%~85%RH (An Environment without Condensation)  10%~85%RH (An Environment without Condensation)  Non-corrosive Environment; Non-conductive Environme Vibration frequency: 5~150Hz Acceleration: 9.8m/s2(1.0G), X, Y, Z directions for 1  times  Compliant with IEC61000-6-2: 2001  Grounding  D Class Grounding  Water Resistance  Front: IP65 (Dust-proof/Anti-drop Design); Back: IP20  Cooling Method  Natural Cooling		Power Consumption	15W(Max)	
Temp.  Storage Ambient Temp.  Operating Ambient Humidity  Environmental Tolerance  Vibration Resistance  Noise Resistance  Noise Resistance  Grounding  Water Resistance  Temp.  10%~85%RH (An Environment without Condensation)  10%~85%		Operating Ambient	0° - 45°	
Temp.  Operating Ambient Humidity  Environmental Tolerance  Vibration Resistance  Noise Resistance  Tolerance  Noise Resistance  Operating Ambient Humidity  Environmental Tolerance  Vibration Resistance  Temp.  Operating Ambient Humidity  Environment without Condensation)  Non-corrosive Environment; Non-conductive Environme  Vibration frequency: 5~150Hz Acceleration: 9.8m/s2(1.0G), X, Y, Z directions for 1  times  Noise Resistance  Compliant with IEC61000-6-2: 2001  Grounding  D Class Grounding  Water Resistance  Front: IP65 (Dust-proof/Anti-drop Design); Back: IP20  Cooling Method  Natural Cooling		Temp.	00~430	
Temp. Operating Ambient Humidity  Environmental Tolerance  Vibration Resistance  Noise Resistance  Noise Resistance  Grounding  Water Resistance  Temp.  10%~85%RH (An Environment without Condensation)  10%~85%RH (An Environment witho		Storage Ambient	-20℃ ~ 60℃	
Humidity  Environmental Tolerance  Vibration Resistance  Noise Resistance  Noise Resistance  Tolerance  Noise Resistance  Noise Resistance  Resistance  Noise Resistance  Compliant with IEC61000-6-2: 2001  Grounding  Water Resistance  Front: IP65 (Dust-proof/Anti-drop Design); Back: IP20  Cooling Method  Natural Cooling		Temp.	20 0 4 00 0	
Humidity  Environmental Tolerance  Vibration Resistance  Noise Resistance  Noise Resistance  Compliant with IEC61000-6-2: 2001  Grounding  Water Resistance  Humidity  Non-corrosive Environment; Non-conductive Environme  IEC 61131-2 Compliant, Vibration frequency: 5~150Hz  Acceleration: 9.8m/s2(1.0G), X, Y, Z directions for 1  times  Compliant with IEC61000-6-2: 2001  Grounding  D Class Grounding  Water Resistance  Front: IP65 (Dust-proof/Anti-drop Design); Back: IP20  Cooling Method  Natural Cooling		Operating Ambient	10%~85%RH (An Environment without Condensation)	
Tolerance    Non-corrosive Environment; Non-conductive Environme   Vibration	/sica	Humidity	1070 0070111 (VIII ETIVITOTITICIN WILIOUT CONGOTIGUIOTI)	
Tolerance  Vibration Resistance  Noise Resistance  Grounding  Water Resistance  Tile C 61131-2 Compliant Vibration frequency: 5~150Hz Acceleration: 9.8m/s2(1.0G), X, Y, Z directions for 1 times  Compliant with IEC61000-6-2: 2001  D Class Grounding  Water Resistance  Front: IP65 (Dust-proof/Anti-drop Design); Back: IP20  Cooling Method  Natural Cooling	P	Environmental	Non-corrosive Environment: Non-conductive Environmen	
Vibration Resistance  Noise Resistance  Compliant with IEC61000-6-2: 2001  Grounding  D Class Grounding  Water Resistance  Front: IP65 (Dust-proof/Anti-drop Design); Back: IP20  Cooling Method  Natural Cooling		Tolerance	·	
Resistance times  Noise Resistance Compliant with IEC61000-6-2 : 2001  Grounding D Class Grounding  Water Resistance Front: IP65 (Dust-proof/Anti-drop Design); Back: IP20  Cooling Method Natural Cooling		Vibration		
Noise Resistance Compliant with IEC61000-6-2: 2001  Grounding D Class Grounding  Water Resistance Front: IP65 (Dust-proof/Anti-drop Design); Back: IP20  Cooling Method Natural Cooling		Resistance	` '	
Grounding  D Class Grounding  Water Resistance Front: IP65 (Dust-proof/Anti-drop Design); Back: IP20  Cooling Method Natural Cooling		Notes Destates		
Water Resistance Front: IP65 (Dust-proof/Anti-drop Design); Back: IP20  Cooling Method Natural Cooling			·	
Cooling Method Natural Cooling		Grounding	D Class Grounding	
Cooling Method Natural Cooling		Water Resistance	Front: IP65 (Dust-proof/Anti-drop Design); Back: IP20	
	_	Cooling Method	Natural Cooling	
Weight 0.85kg  Exterior Dimensions 200x146x42.5	latio	Weight	0.85kg	
Exterior Dimensions	ıstal	Exterior Dimensions	200x146x42.5	
W×H×D(mm)	<u> </u>	W×H×D(mm)		
Hole-cutting Size		Hole-cutting Size	102v120	
(mm) 192x138		(mm)	192X138	

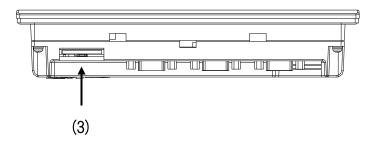
# II . Part Names



(2)

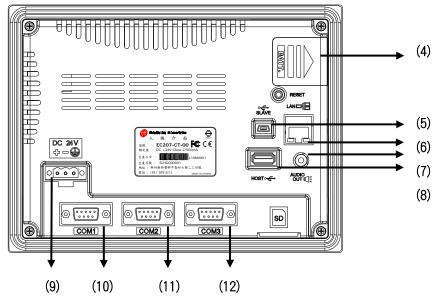
## Front:

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



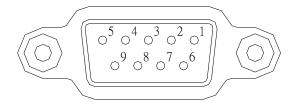
### Bottom:

No	Name	Description	
3	SD card interface	For installing SD card	



#### Back:

No	Name	Description	
4	Battery Holder	Houses the Battery	
5	USB Device	For connecting a DC	
5	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	СОМЗ	RS232C	



#### PIN definition of serial communication:

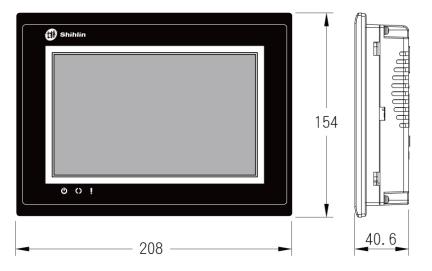
PIN NO.	COM1	COM2	СОМ3
1	TX+/A	TX+/A	-
2	TX	TX	TX
3	RX	RX	RX
4	RX+	RX+	-
5	GND	GND	GND
6	RX-	RX-	-
7	RTS	-	RTS
8	CTS	-	CTS
9	TX-/B	TX-/B	-

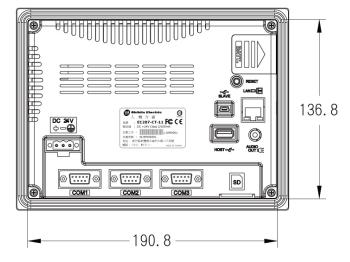
RS-232: TX/RX/CTS/RTS/GND

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

RS-485 : A/B

#### III . External Dimensions







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



MODLE : **EC207-CT-00 F© C €** 

INPUT: DC +24V /500mA

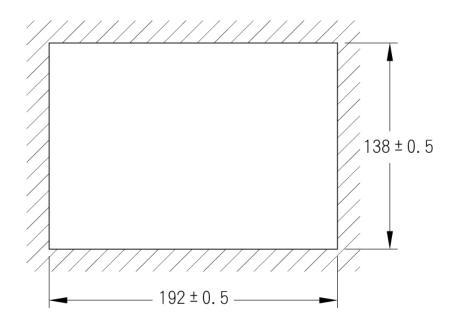
SERIAL NO : SLHO00001

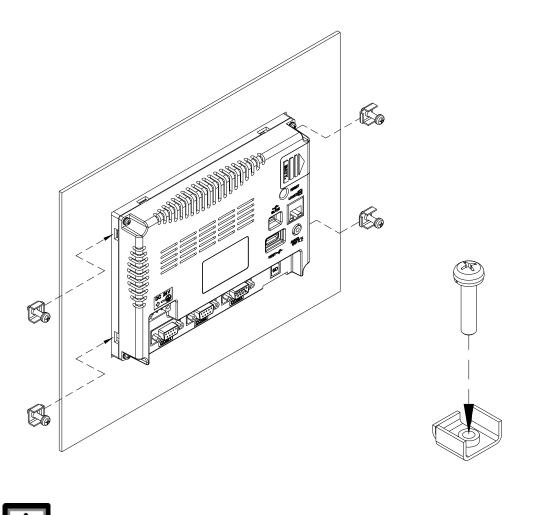
MADE IN TAIWAN

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

## **V** \ Installation

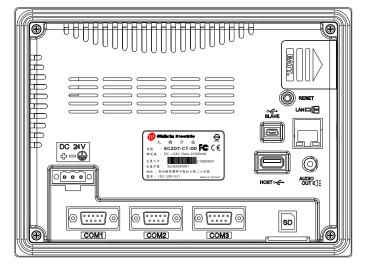
Make an installation hole on the control panel the dimensions shown below.(Unit: mm)

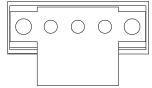




◆ Max torque:0.3 Nm (2.65 lb-in).

### VI . Connecting the Power Cord





- To avoid an electric shock, prior to connecting the EC207 unit's power cord terminals to the power terminal block, confirm that the EC207 unit's power supply is completely turned OFF, via a breaker, or similar unit.
- Supplying a power voltage other than that specified will damage the power source and the EC207 unit.
- Since there is no power switch on the EC207 unit, be sure to attach a breaker-type switch to its power cord.
- When the FG terminal is connected, be sure the wire is grounded.
- Not grounding the EC207 unit will result in excess noise and vibration.
- The SG and FG terminals are connected internally in the EC207 unit.
- When connecting the SG wire to another device, be sure that the design of the system/connection does not produce a shorting loop.



- Before plugging or unplugging the power terminal, make sure to cut off the power supply or it may damage the electric communication components of the human machine interface.
- It is recommended that the user add a core to the input terminal of the power line.