



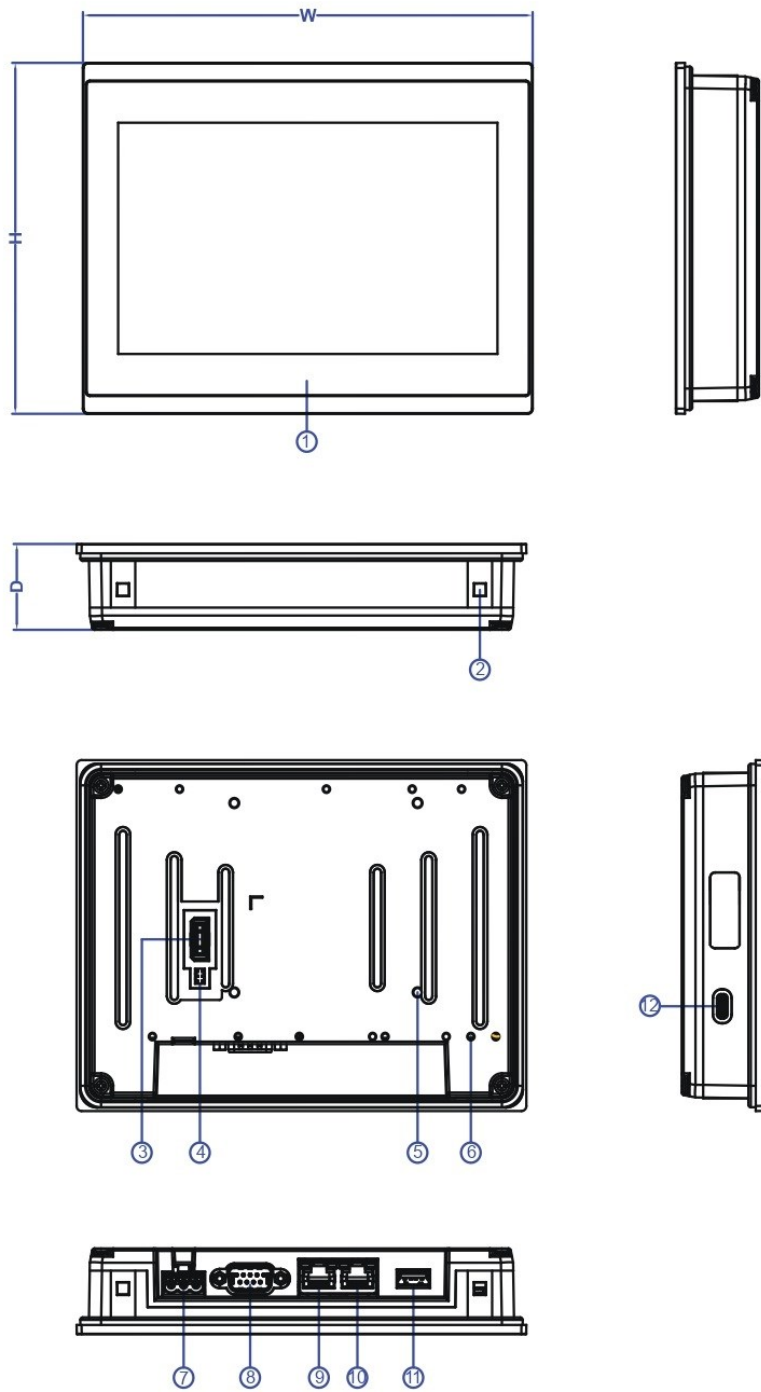
# U7070NA

HMI with 7" TFT LCD display

- ✧ Built-in Power Isolation
- ✧ Built-in PLC Expansion function
- ✧ PCB coating for Stability in Harsh Environment
- ✧ Fan-less Design for Cooling Method
- ✧ High Noise Immunity Design for Industrial Application

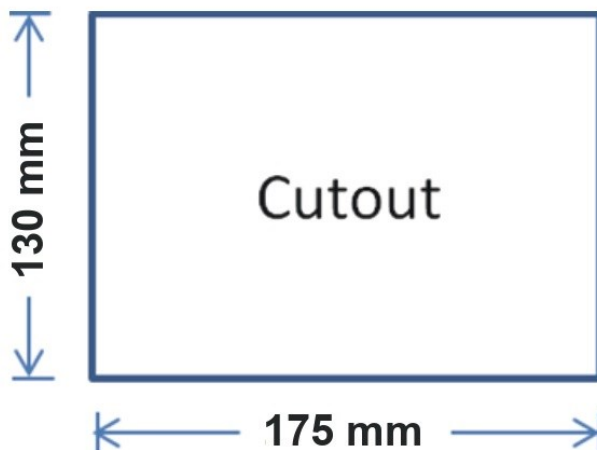
Display	Panel Size	7" TFT (16:9)	I/O Port	Serial (DB-9)	RS-232 (2W) RS-422/485 (4W) RS-485 (2W)
	Panel Resolution	1024 x 600		RS-422/485 Isolation	–
	Brightness	500 (cd/m <sup>2</sup> )		Ethernet 1	10M / 100M / 1000M
	Contrast Ratio	700		Ethernet 2	10M / 100M
	Backlight Type	LED		USB HOST	USB2.0 x 1
	Backlight Life Time	30,000 Hrs		USB Device	USB2.0 x 1 (USB Type C)
	Colors	16.7M		Micro-SD Slot	–
	LCD Viewing Angle	70/50/70/70 (T/B/L/R)		Audio Output	–
Touch	Type	4-wire Resistive Type	I/O Extension	Video Input	–
	Accuracy	X axis ±2%; Y axis ±2%		Termination Switch	Yes
Memory	Flash	4GB	Power	PLC Extension	Yes
	RAM	1GB		HMI Extension	Yes
System	CPU	32bit RISC Cortex-A15 800MHz	Wireless Module	Yes	
	RTC	Yes		Power Input Range	14 ~ 32VDC
Dimension /Weight	Dimensions W x H x D	184.0 x 139.0 x 34.0 (mm)	Power	Power Isolation	Yes
	Cut-out	175.0 x 130.0 (mm)		Isolation Resistance	Exceed 50MΩ at 500VDC
	Weight	850 (g)		Power Consumption	21W (@24VDC)
Environment	Protection Structure	Front panel : IP66 / Rear Case : IP20			
	PCB Coating	Yes			
	Operating Temp	-20 ~ 60°C			
	Storage Temp	-20 ~ 60°C			
	Relative Humidity	10%~90% (40°C Non-condensing)			
	Withstand Voltage	500VAC/20mA/1 Min. (between charger & FG terminals)			
	Vibration Endurance	5 to 9Hz Half-amplitude: 3.5mm ; 9 to 150 Hz Constant acceleration: 19.6m/s <sup>2</sup> (2G) ; 3 directions of X, Y, Z : 10times (IEC61131-2 complaints)			
Software	FvDesigner V1.6.16 or later versions				
Certification	CE				

## ◆ Dimensions Drawing

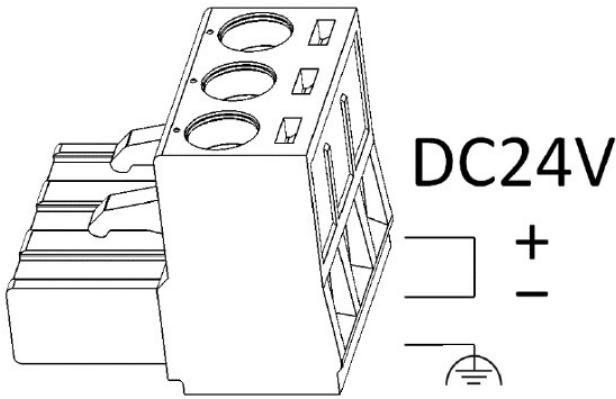


W	184 mm
H	139 mm
D	34 mm

①	Power Indicator Light
②	Mounting Hole
③	Expansion module connector
④	HB1 PLC Connector
⑤	EVSA Screw Hole (Optional) (Hole depth 7.5mm)
⑥	HB1 PLC Screw Hole
⑦	Power Connector
⑧	COM1/COM2/COM3: DB-9 Male Connector
⑨	LAN0 : 10/100/1000Mbps Ethernet RJ45 Connector
⑩	LAN1 : 10/100Mbps Ethernet RJ45 Connector
⑪	USB Connector
⑫	USB type C Connector



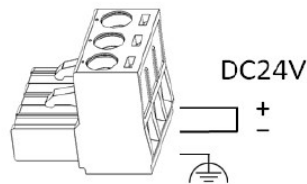
DB-9 Male Connector				
PIN#	COM1 [RS-232]	COM2 [RS-422]	COM2 [RS-485]	COM3 [RS-485]
1	NC <sup>1)</sup>	TX+	DATA+	NC
2	RX	NC	NC	NC
3	TX	NC	NC	NC
4	NC	RX+	NC	NC
5	GND	GND	GND	GND
6	NC	TX-	DATA-	NC
7	NC	NC	NC	DATA+
8	NC	NC	NC	DATA-
9	NC	RX-	NC	NC



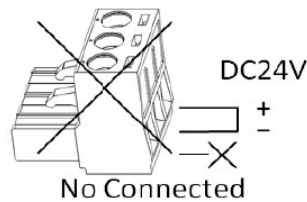
- Be sure to connect the ground FG terminal to a class-3 ground (Ground resistance should not exceed 100Ω). Try to make the ground wire as short as possible.
- Use 24 – 12 AWG (0.201 – 3.24 mm<sup>2</sup>) wire for the power connections.

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

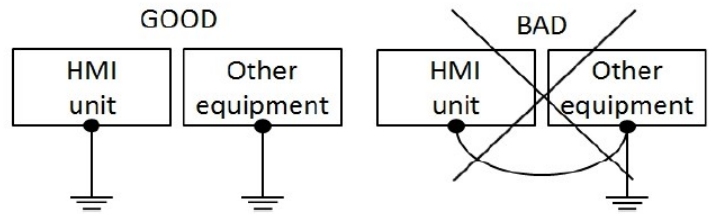
**Recommended**



**Prohibited**



- HMI unit and other equipment should have the same electrical grounding (reference voltage level), otherwise communication errors may occur.



- Wire Routing
  - .Use cable type - AWG (American Wire Gauge) 24 or better and the corresponding pin type cable terminals. Tighten terminal screws with a torque value of 4.42 lb-in. Do not use excessive force when fixing wiring.
  - a.Utilisez le type de câble - AWG (American Wire Gauge) 24 ou supérieur. Valeur de couple de 4.42 lb-in.
  - b.The rating of the power wire used must be at least 105°C.
  - b.Le calibre du fil d'alimentation utilisé doit être d'au moins 105 ° C.
  - c.USE COPPER CONDUCTORS ONLY.
  - c.DESTINÉ À ÊTRE UTILISÉ AVEC DES CONDUCTEURS EN CUIVRE SEULEMENT.
  - d.Use dry cloth to clean the product.
  - d.Utilisez un chiffon sec pour nettoyer le produit.

- The product is open type, intended to be installed in and industrial control panel or an enclosure.
  - Altitude up to 2000 m
  - The product is indoor use only, in Pollution Degree 2 environment.
- If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired