MERITEK
Automation reliable & smart

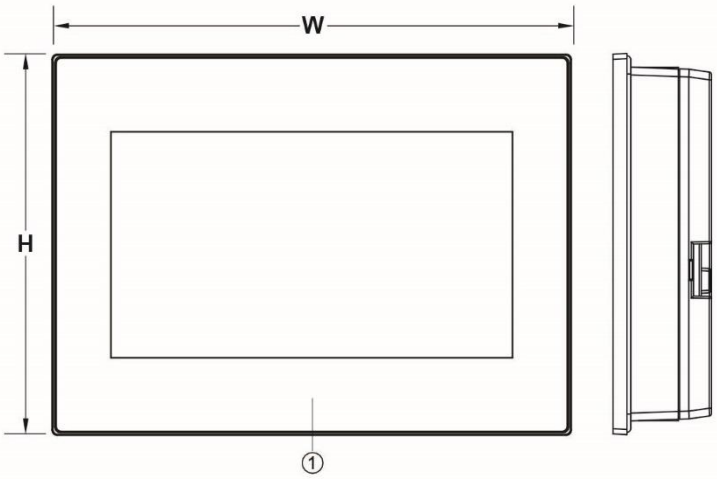
P5070SA

HMI with 7" TFT LCD display

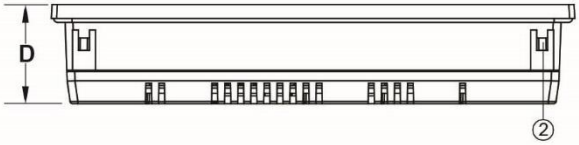
- ✧ Cortex 600 MHz Processor
- ✧ Built-in Power Isolation
- ✧ Built-in PLC Expansion function
- ✧ PCB coating for Stability in Harsh Environment
- ✧ Fan-less Design for Cooling Method
- ✧ High Noise Immunity Design for Industrial Application

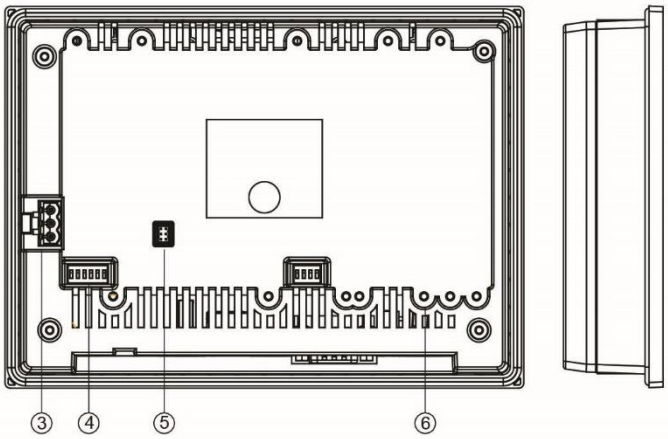
Display	Panel Size	7" TFT (16:9)	I/O Port	Serial 1 (DB-9)	RS-232 (2W)
	Panel Resolution	800 x 480		Serial 2 (Terminal Blocks)	RS-422/485 (4W) RS-485 (2W)
	Brightness	400 (cd/m²)		RS-422/485 Isolation	–
	Contrast Ratio	500		Ethernet	–
	Backlight Type	LED		USB HOST	USB2.0 x 1
	Backlight Life Time	30,000 Hrs		USB Device	USB2.0 x 1(Mini-USB)
	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		Video Input	–
	Accuracy	X axis±2%; Y axis±2%		Termination Switch	Yes
Memory	Flash	256MB	I/O Extension	PLC Extension	Yes
	RAM	128MB		HMI Extension	Yes
System	CPU	32 bit RISC Cortex 600MHz		Wireless Module	Yes
	RTC	Yes	Power	Power Input Range	14 ~ 32VDC
Dimension /Weight	Dimensions W x H x D	201.0 x 147.0 x38.3 (mm)		Power Isolation	Yes
	Cut-out	191.5 x 137.5 (mm)		Isolation Resistance	Exceed 50MΩ at 500VDC
	Weight	610 (g)		Power Consumption	11.5W (@24VDC)
Environment	Protection Structure	Front panel：IP65 / Rear Case：IP20			
	PCB Coating	Yes			
	Operating Temp	0~50℃			
	Storage Temp	-20 ~ 60℃			
	Relative Humidity	10%~90% (40℃ 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/s2 (2G) ; 3 directions of X, Y, Z: 10times (IEC61131-2 complaints)			
Software	FvDesigner V1.5.64 or later versions				
Certification	CE , UL				

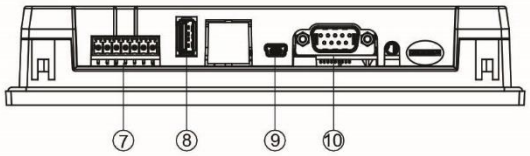
◆ Dimensions Drawing



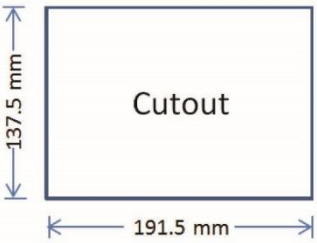
W	201.0 mm
H	147.0 mm
D	38.3 mm



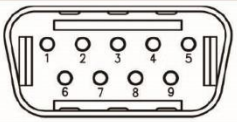




①	Power Indicator Light
②	Mounting Hole
③	Power Connector
④	COM3/COM4 Termination Switch
⑤	HB1 PLC Connector
⑥	HB1 PLC Screw Hole
⑦	COM3/COM4: Pluggable Terminal Block
⑧	USB Connector
⑨	Mini USB Connector
⑩	COM1: DB-9 Male Connector

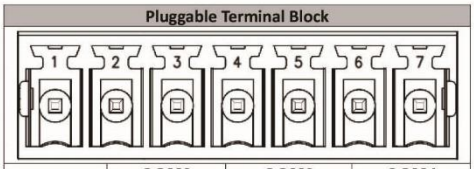


DB-9 Male Connector



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

Pluggable Terminal Block



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-	-