FATEK® The Brand You Can Rely On



P2043A

HMI with 4.3" TFT LCD

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

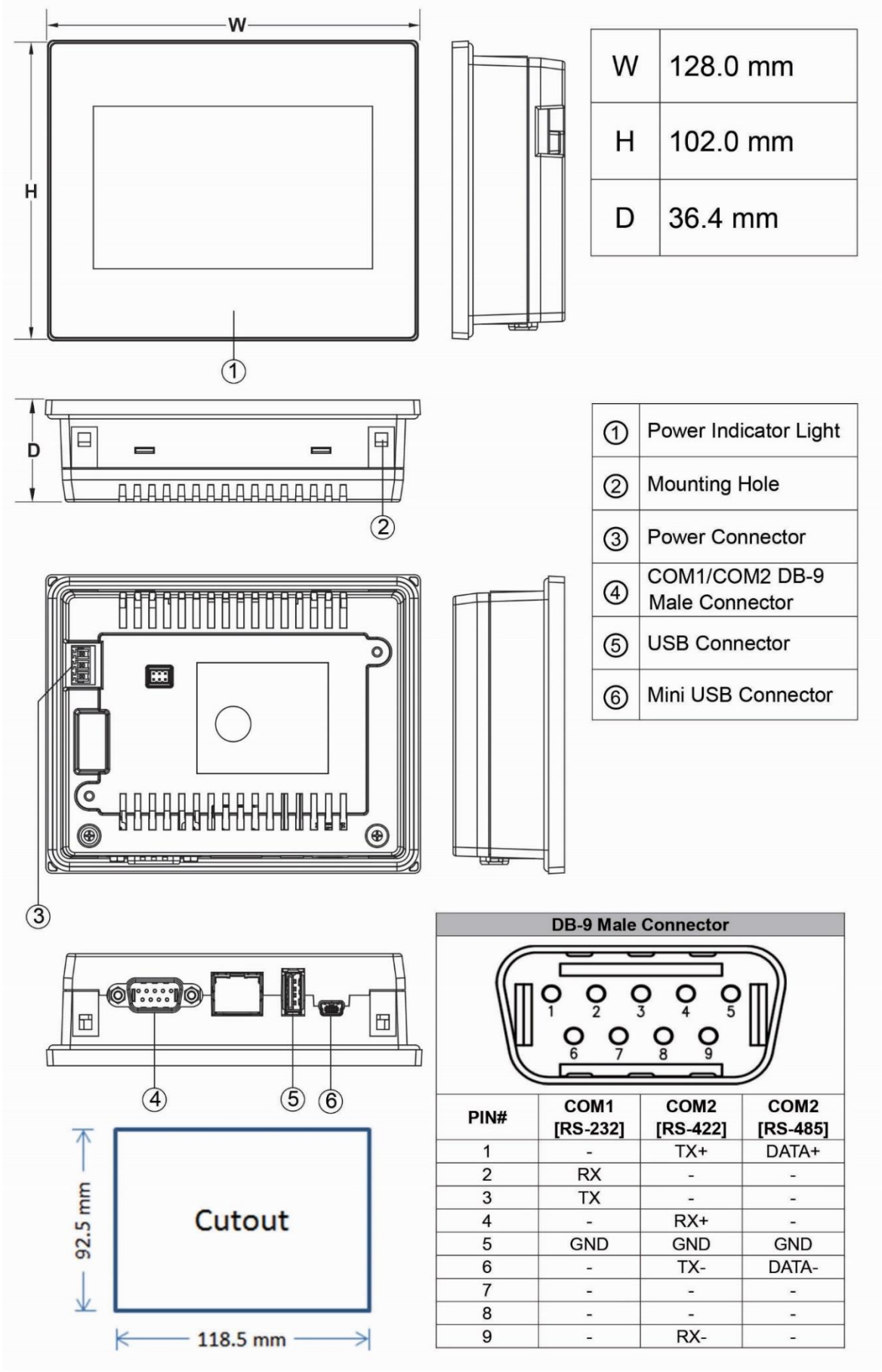
	Model	P2043SA	P2043NA
Display	Panel Size	4.3" TFT (16:9)	
	Panel Resolution	480 x 272	
	Brightness	500 (cd/㎡)	
	Contrast Ratio	500	
	Backlight Type	LED	
	Backlight Life Time	>30,000 Hrs.	
	Colors	16.7M	
	LCD Viewing Angle	50/70/70/70 (T/B/L/R)	
Touch	Type	4-wire Resistive Type	
	Accuracy	X axis±2%; Y axis±2%	
Memory	Flash	128MB	
	RAM	128MB	
System	CPU	32 bit RISC Cortex 600MHz	
	RTC*	Yes	
Dimension /Weight	Dimensions W x H x D	128.0 x 102.0 x36.4 (mm)	
	Cut-out	118.5 x 92.5 (mm)	
	Weight	215 (g)	235 (g)
I/O Port	Serial 1 (DB-9)	COM1：RS-232 (2W) COM2：RS-422/485 (4W)	
	Serial 2 (Terminal Blocks)	–	
	RS-422/485 Isolation	–	
	Ethernet	–	10M / 100M
	USB HOST	USB2.0 x 1	
	USB Device	USB2.0 x 1(Mini-USB)	
	Micro-SD Slot	–	
	Audio Output	–	
	Video Input	–	
	Termination Switch	–	
I/O Extension	PLC Extension*	Optional	
	HMI Extension	Yes	
	Wireless Module	Yes	
Power	Power Input Range	14 ~ 32VDC	
	Isolation Resistance	Exceed 50MΩ at 500VDC	
	Power Consumption	9.6W (@24VDC)	10.1W (@24VDC)
Environment	Protection Structure	Front panel：IP65 / Rear Case：IP20	
	PCB Coating	Yes	
	Operating Temp	0~50°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/s2 (2G) ; 3 directions of X, Y, Z : 10times (IEC61131-2 complaints)	
Software	FvDesigner V1.6.62 or later versions		
Certification	CE		

* The MIT version features PLC port and an integrated RTC battery for calendar functions.

* The MIC version lacks a PLC port and requires the battery to be installed manually for calendar functionality.

「 Dimensions Drawing 」

P2043SA



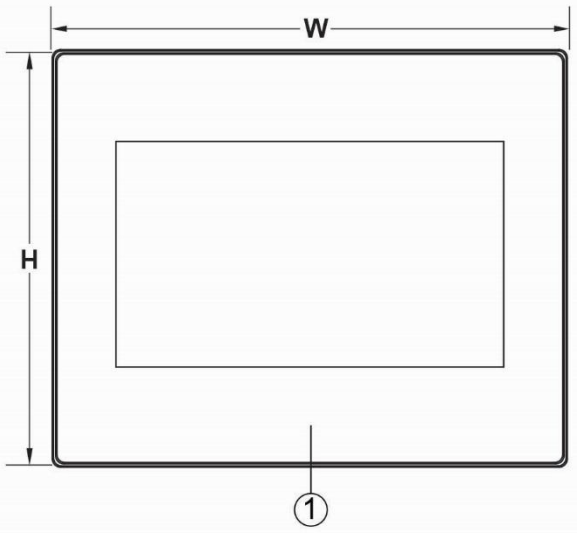
W	128.0 mm
H	102.0 mm
D	36.4 mm

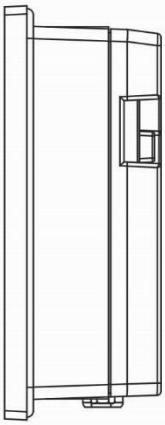
①	Power Indicator Light
②	Mounting Hole
③	Power Connector
④	COM1/COM2 DB-9 Male Connector
⑤	USB Connector
⑥	Mini USB Connector

DB-9 Male Connector

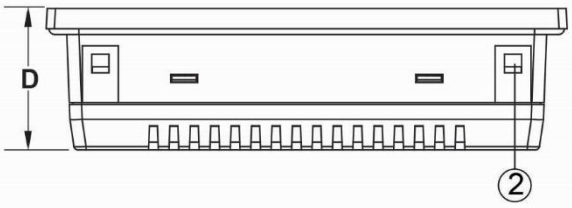
PIN#	COM1 [RS-232]	COM2 [RS-422]	COM2 [RS-485]
1	-	TX+	DATA+
2	RX	-	-
3	TX	-	-
4	-	RX+	-
5	GND	GND	GND
6	-	TX-	DATA-
7	-	-	-
8	-	-	-
9	-	RX-	-

P2043NA

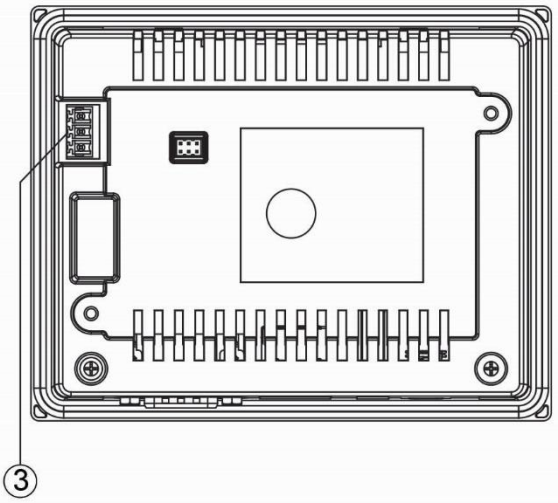


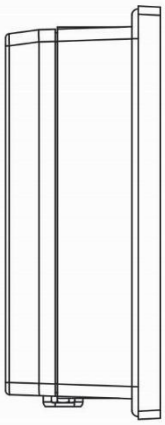


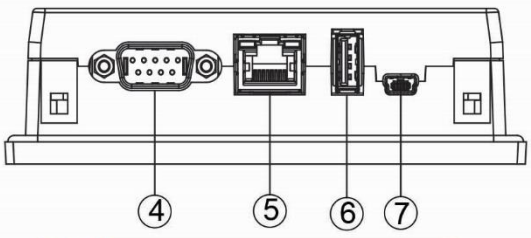
W	128.0 mm
H	102.0 mm
D	36.4 mm

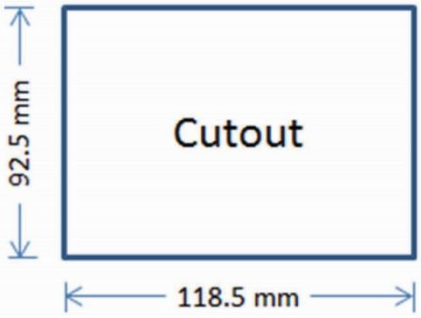


①	Power Indicator Light
②	Mounting Hole
③	Power Connector
④	COM1/COM2 DB-9 Male Connector
⑤	Ethernet RJ45 Connector
⑥	USB Connector
⑦	Mini USB Connector

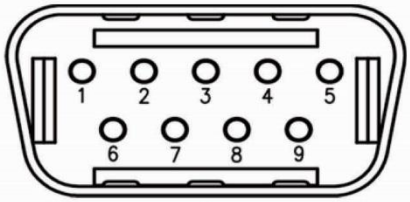








DB-9 Male Connector



PIN#	COM1 [RS-232]	COM2 [RS-422]	COM2 [RS-485]
1	-	TX+	DATA+
2	RX	-	-
3	TX	-	-
4	-	RX+	-
5	GND	GND	GND
6	-	TX-	DATA-
7	-	-	-
8	-	-	-
9	-	RX-	-

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P2070A

HMI with 7" TFT LCD display

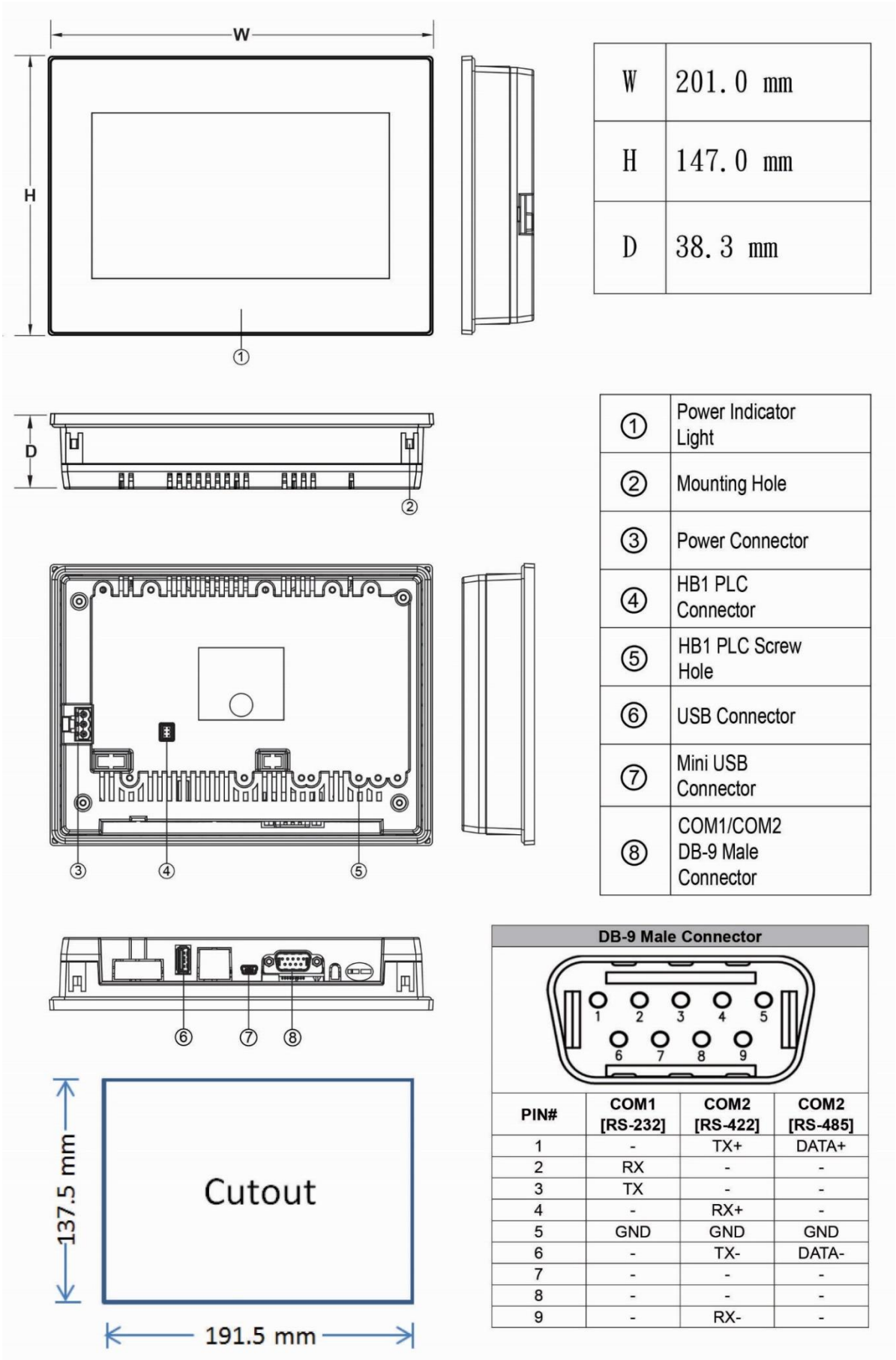
- ✧ Cortex 600 MHz Processor
- ✧ Built-in PLC Expansion function
- ✧ Wide Power Input Range
- ✧ PCB coating for Stability in Harsh Environment
- ✧ Fan-less Design for Cooling Method
- ✧ High Noise Immunity Design for Industrial Application

	Model	P2070SA	P2070NA
Display	Panel Size	7.0" TFT (16:9)	
	Panel Resolution	800 x 480	
	Brightness	200 (cd/㎡)	
	Contrast Ratio	500	
	Backlight Type	LED	
	Backlight Life Time	>30,000 Hrs.	
	Colors	16.7M	
	LCD Viewing Angle	70/50/70/70 (T/B/L/R)	
Touch	Type	4-wire Resistive Type	
	Accuracy	X axis±2%; Y axis±2%	
Memory	Flash	128MB	
	RAM	128MB	
System	CPU	32 bit RISC Cortex 600MHz	
	RTC*	Yes	
Dimension /Weight	Dimensions W x H x D	201.0 x 147.0 x 38.3 (mm)	
	Cut-out	191.5 x 137.5 (mm)	
	Weight	550 (g)	570 (g)
I/O Port	Serial 1 (DB-9)	COM1：RS-232 (2W) COM2：RS-422/485 (4W)	
	Serial 2 (Terminal Blocks)	–	
	RS-422/485 Isolation	–	
	Ethernet	–	10M / 100M
	USB HOST	USB2.0 x 1	
	USB Device	USB2.0 x 1(Mini-USB)	
	Micro-SD Slot	–	
	Audio Output	–	
	Video Input	–	
	Termination Switch	–	
I/O Extension	PLC Extension*	Optional	
	HMI Extension	Yes	
	Wireless Module	Yes	
Power	Power Input Range	14 ~ 32VDC	
	Isolation Resistance	Exceed 50MΩ at 500VDC	
	Power Consumption	12.0W (@24VDC)	12.5W (@24VDC)
Environment	Protection Structure	Front panel：IP65 / Rear Case：IP20	
	PCB Coating	Yes	
	Operating Temp	0~50°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/s2 (2G) ; 3 directions of X, Y, Z : 10times (IEC61131-2 complaints)	
Software		FvDesigner V1.6.62 or later versions	
Certification		CE	

* The MIT version features PLC port and an integrated RTC battery for calendar functions.
* The MIC version lacks a PLC port and requires the battery to be installed manually for calendar functionality.

「 Dimensions Drawing 」

P2070SA



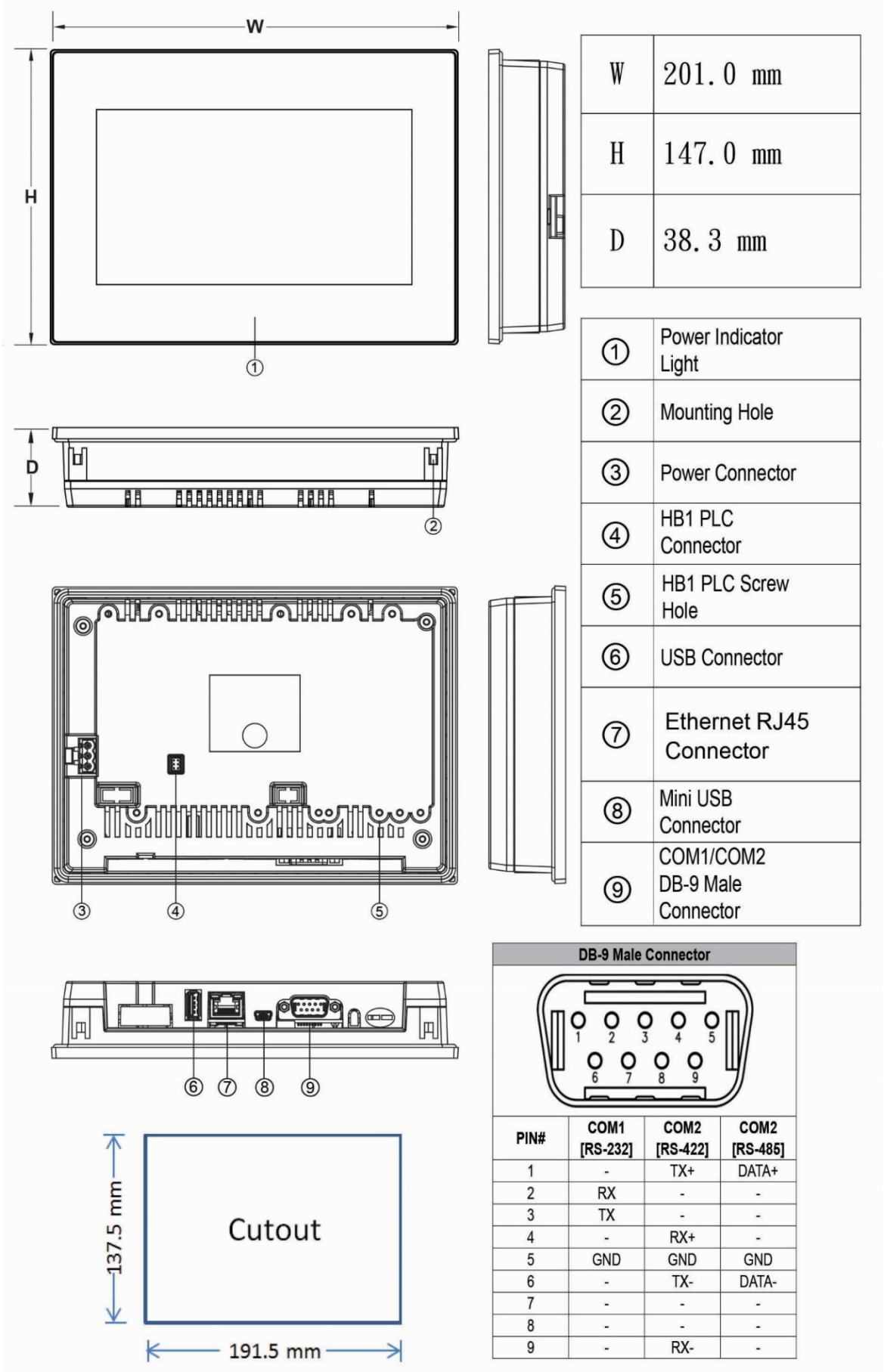
W	201.0 mm
H	147.0 mm
D	38.3 mm

①	Power Indicator Light
②	Mounting Hole
③	Power Connector
④	HB1 PLC Connector
⑤	HB1 PLC Screw Hole
⑥	USB Connector
⑦	Mini USB Connector
⑧	COM1/COM2 DB-9 Male Connector

DB-9 Male Connector

PIN#	COM1 [RS-232]	COM2 [RS-422]	COM2 [RS-485]
1	-	TX+	DATA+
2	RX	-	-
3	TX	-	-
4	-	RX+	-
5	GND	GND	GND
6	-	TX-	DATA-
7	-	-	-
8	-	-	-
9	-	RX-	-

P2070NA



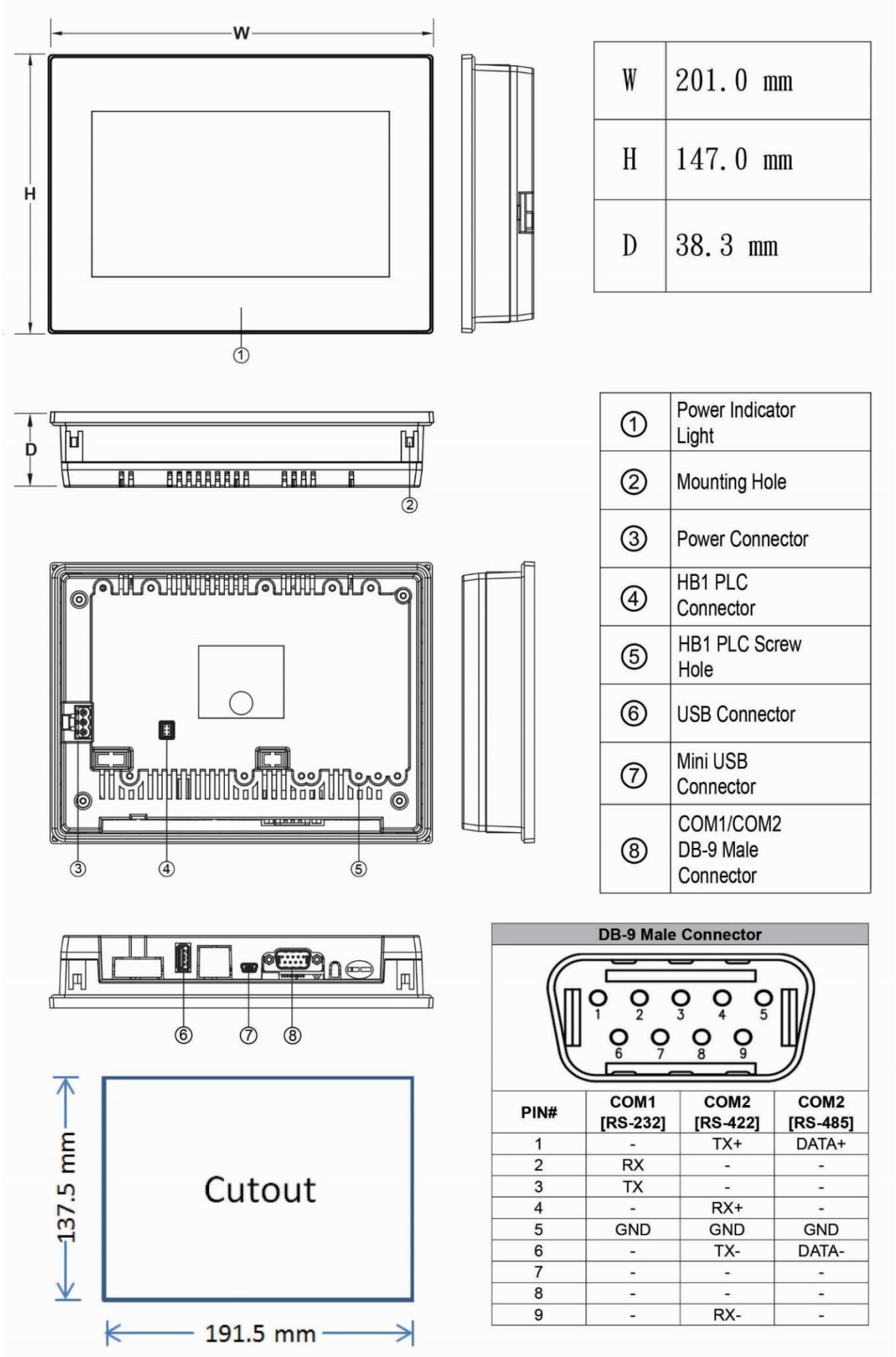
W	201.0 mm
H	147.0 mm
D	38.3 mm

①	Power Indicator Light
②	Mounting Hole
③	Power Connector
④	HB1 PLC Connector
⑤	HB1 PLC Screw Hole
⑥	USB Connector
⑦	Ethernet RJ45 Connector
⑧	Mini USB Connector
⑨	COM1/COM2 DB-9 Male Connector

DB-9 Male Connector

PIN#	COM1 [RS-232]	COM2 [RS-422]	COM2 [RS-485]
1	-	TX+	DATA+
2	RX	-	-
3	TX	-	-
4	-	RX+	-
5	GND	GND	GND
6	-	TX-	DATA-
7	-	-	-
8	-	-	-
9	-	RX-	-

P2070PA



W	201.0 mm
H	147.0 mm
D	38.3 mm

①	Power Indicator Light
②	Mounting Hole
③	Power Connector
④	HB1 PLC Connector
⑤	HB1 PLC Screw Hole
⑥	USB Connector
⑦	Mini USB Connector
⑧	COM1/COM2 DB-9 Male Connector

DB-9 Male Connector

PIN#	COM1 [RS-232]	COM2 [RS-422]	COM2 [RS-485]
1	-	TX+	DATA+
2	RX	-	-
3	TX	-	-
4	-	RX+	-
5	GND	GND	GND
6	-	TX-	DATA-
7	-	-	-
8	-	-	-
9	-	RX-	-

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P2101A

HMI with 10.1" TFT LCD display

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

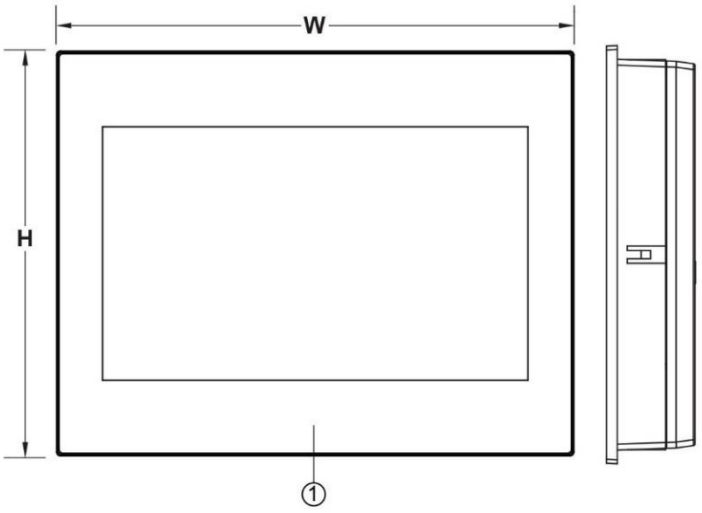
	Model	P2101SA	P2101NA
Display	Panel Size	10.1" TFT (16:9)	
	Panel Resolution	1024 x 600	
	Brightness	300 (cd/㎡)	
	Contrast Ratio	450	
	Backlight Type	LED	
	Backlight Life Time	>30,000 Hrs.	
	Colors	16.7M	
	LCD Viewing Angle	50/20/55/55 (T/B/L/R)	
Touch	Type	4-wire Resistive Type	
	Accuracy	X axis±2%; Y axis±2%	
Memory	Flash	128MB	
	RAM	128MB	
System	CPU	32 bit RISC Cortex 600MHz	
	RTC*	Yes	
Dimension /Weight	Dimensions W x H x D	271.5 x 213.5 x 44.9 (mm)	
	Cut-out	259.5 x 201.5 (mm)	
	Weight	1300 (g)	1320 (g)
I/O Port	Serial 1 (DB-9)	COM1：RS-232 (2W) COM2：RS-422/485 (4W) COM3：RS-485 (2W)	
	Serial 2 (Terminal Blocks)	–	
	RS-422/485 Isolation	–	
	Ethernet	–	10M / 100M
	USB HOST	USB2.0 x 1	
	USB Device	USB2.0 x 1(Mini-USB)	
	Micro-SD Slot	–	
	Audio Output	–	
	Video Input	–	
	Termination Switch	–	
I/O Extension	PLC Extension*	Optional	
	HMI Extension	Yes	
	Wireless Module	Yes	
Power	Power Input Range	14 ~ 32VDC	
	Isolation Resistance	Exceed 50MΩ at 500VDC	
	Power Consumption	11.0W (@24VDC)	11.5W (@24VDC)
Environment	Protection Structure	Front panel：IP65 / Rear Case：IP20	
	PCB Coating	Yes	
	Operating Temp	0~50°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/s2 (2G) ; 3 directions of X, Y, Z : 10times (IEC61131-2 complaints)	
Software	FvDesigner V1.6.62 or later versions		
Certification	CE		

* The MIT version features PLC port and an integrated RTC battery for calendar functions.

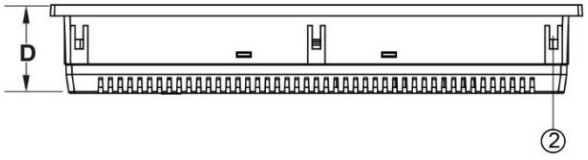
* The MIC version lacks a PLC port and requires the battery to be installed manually for calendar functionality.

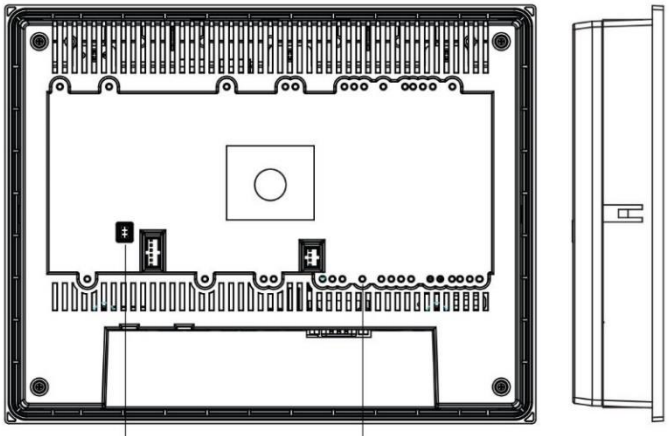
「 Dimensions Drawing 」

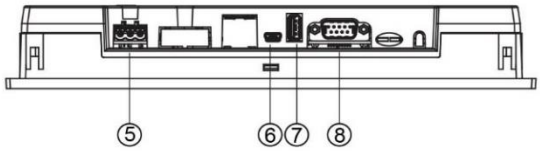
P2101SA



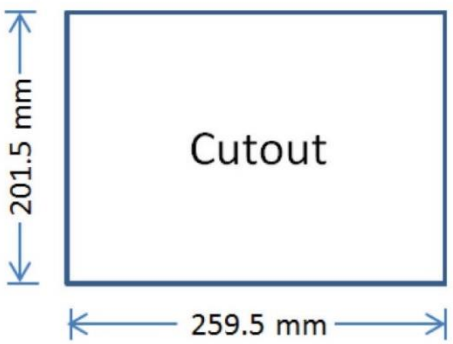
W	271.5 mm
H	213.5 mm
D	44.9 mm



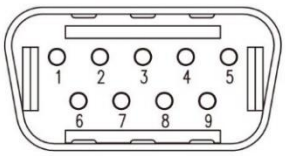




①	Power Indicator Light
②	Mounting Hole
③	HB1 PLC Connector
④	HB1 PLC Screw Hole
⑤	Power Connector
⑥	Mini USB Connector
⑦	USB Connector
⑧	COM1/COM2/COM3 DB-9 Male Connector

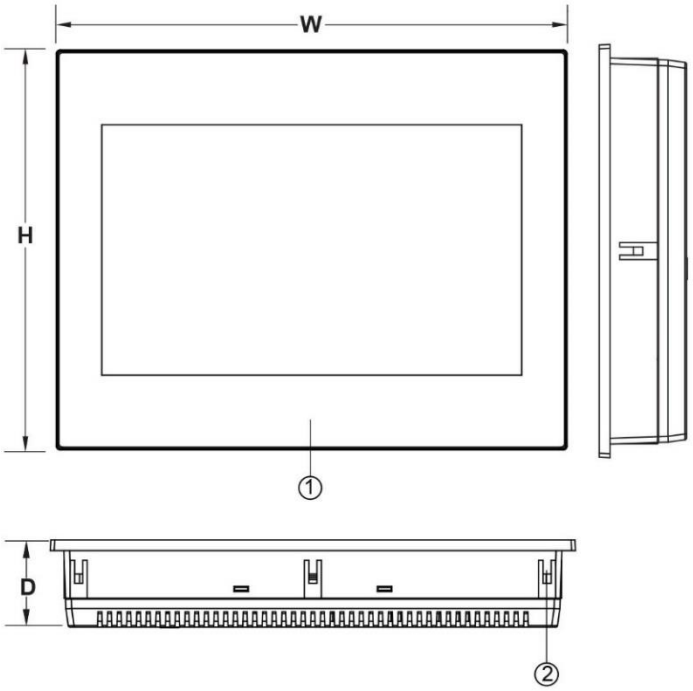


DB-9 Male Connector

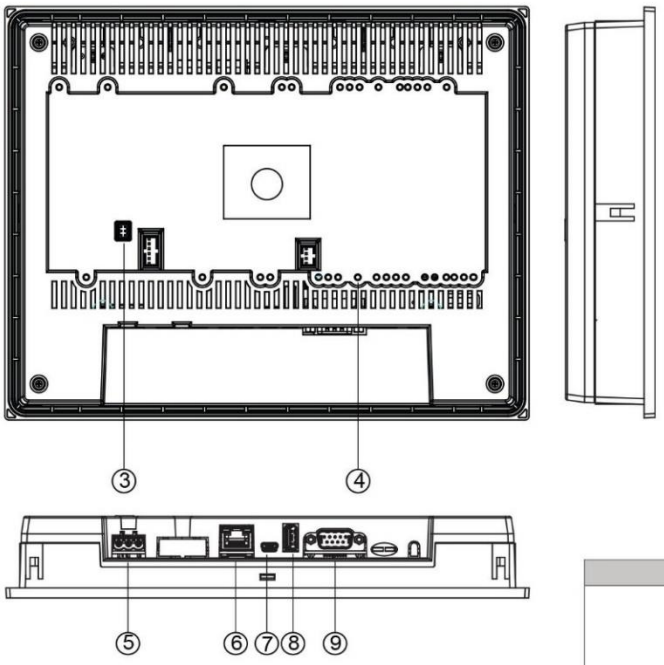


PIN	COM1 [RS-232]	COM2 [RS-422]	COM2 [RS-485]	COM3 [RS-485]
1	-	TX+	DATA+	-
2	RX	-	-	-
3	TX	-	-	-
4		RX+	-	-
5	GND	GND	GND	GND
6	-	TX-	DATA-	-
7	-	-	-	DATA+
8	-	-	-	DATA-
9	-	RX-	-	-

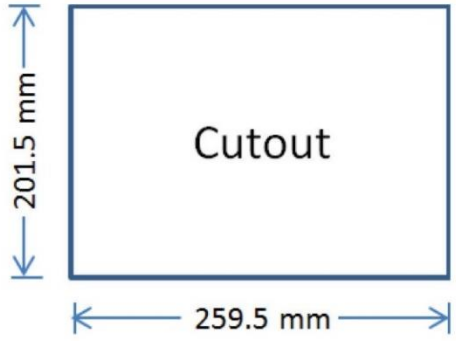
P2101NA



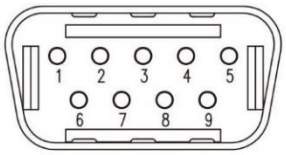
W	271.5 mm
H	213.5 mm
D	44.9 mm



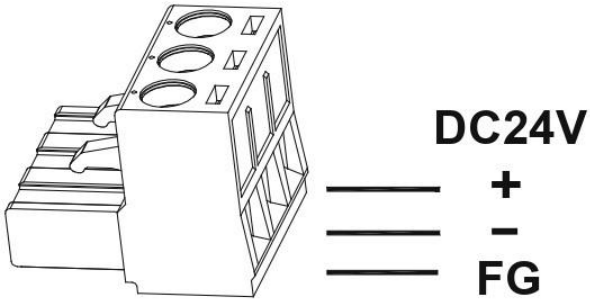
①	Power Indicator Light
②	Mounting Hole
③	HB1 PLC Connector
④	HB1 PLC Screw Hole
⑤	Power Connector
⑥	Ethernet RJ45 Connector
⑦	Mini USB Connector
⑧	USB Connector
⑨	COM1/COM2/COM3 DB-9 Male Connector



DB-9 Male Connector



PIN	COM1 [RS-232]	COM2 [RS-422]	COM2 [RS-485]	COM3 [RS-485]
1	-	TX+	DATA+	-
2	RX	-	-	-
3	TX	-	-	-
4		RX+	-	-
5	GND	GND	GND	GND
6	-	TX-	DATA-	-
7	-	-	-	DATA+
8	-	-	-	DATA-
9	-	RX-	-	-

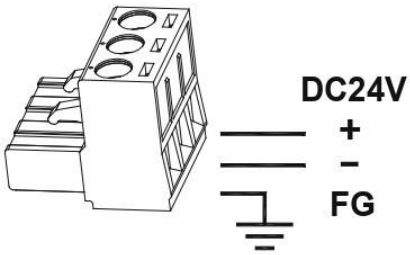


- Be sure to connect the ground FG terminal to a class-3 ground (Ground resistance should not exceed 100Ω). Try to make the ground wire as short as possible.
- Use 22 – 14 AWG (0.6 – 1.5 mm^2) wire for the power connections.

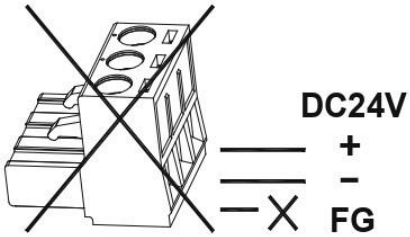
⚠ Caution	Please use solid wires between 22AWG and 14AWG. Maximum 300V and rated temperature to 105°C for input power pins.

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

Recommended



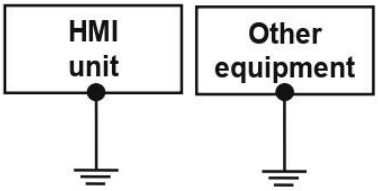
Prohibited



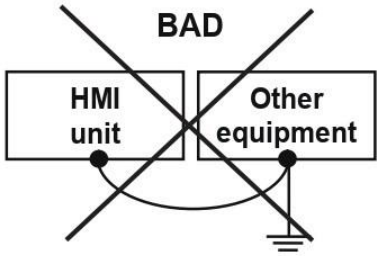
No Connected

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

GOOD



BAD



Operation

- Do not use sharp objects or excessive force to press the touch screen. This may damage the touch screen. Screen protector can be applied to the HMI screen to portect if from damage, for ordering information, please contact our sales department.
- 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.

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.