



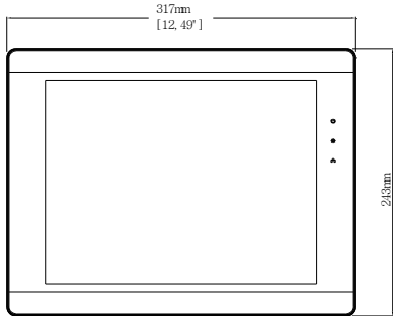
### Features

- 12.1" 1024 x 768 IPS LCD, LED Backlight
- Slim Design
- Fan-less Cooling System
- Built-in 256 MB Flash Memory
- SD Card Slot for Expansion of Storage
- One USB Host Port and one USB Client Port
- COM1 and COM3 RS-485 Built-in Isolation
- COM1 and COM3 RS-485 2W support MPI 187.5K, please use one at a time
- Built-in Power Isolator
- NEMA4 / IP65 Compliant Front Panel

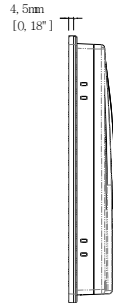
<b>Display</b>	Display	12.1" IPS
	Resolution	1024 x 768
	Brightness (cd/m <sup>2</sup> )	500
	Contrast Ratio	1000:1
	Backlight Type	LED
	Backlight Life Time	>30,000 hrs.
	Colors	16.7M
	LCD Viewing Angle (T/B/L/R)	89/89/89/89
	Pixel Pitch (mm)	0.240 (H) x 0.240 (V)
<b>Touch Panel</b>	Type	4-wire Resistive Type
	Accuracy	Active Area Length(X)±2%, Width(Y)±2%
<b>Memory</b>	Flash	256 MB
	RAM	256 MB
<b>Processor</b>		32-bit RISC 1GHz
<b>I/O Port</b>	SD Card Slot	SD/SDHC
	USB Host	USB 2.0 x 1
	USB Client	USB 2.0 x 1
	Ethernet	10/100 Base-T x 1
	COM Port	COM1: RS-232/RS-485 2W/4W, COM3: RS-485 2W
	RS-485 Dual Isolation	Yes
	CAN Bus	N/A
	HDMI	N/A
	Audio Output	N/A
Video Input	N/A	
<b>RTC</b>		Built-in
<b>Power</b>	Input Power	24±20%VDC
	Power Isolation	Built-in
	Power Consumption	1.5A@24VDC
	Voltage Resistance	500VAC (1 min.)
	Isolation Resistance	Exceed 50MΩ at 500VDC
	Vibration Endurance	10 to 25Hz (X, Y, Z direction 2G 30 minutes)
<b>Specification</b>	PCB Coating	Yes
	Enclosure	Plastic
	Dimensions WxHxD	317 x 243 x 41 mm
	Panel Cutout	305 x 231 mm
	Weight	Approx. 1.7 kg
	Mount	Panel mount, VESA mount 75 x 75 mm
<b>Environment</b>	Protection Structure	NEMA4 / IP65 Compliant Front Panel
	Storage Temperature	-20° ~ 60°C (-4° ~ 140°F)
	Operating Temperature	0° ~ 50°C (32° ~ 122°F)
	Relative Humidity	10% ~ 90% (non-condensing)
<b>Certificate</b>	CE	CE marked
<b>Software</b>		EasyBuilder Pro V4.00.01 or later versions



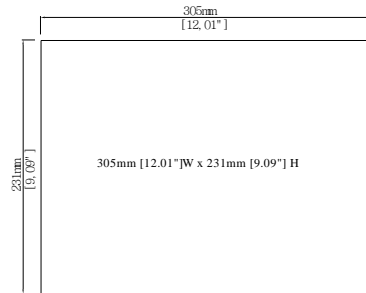
Top View



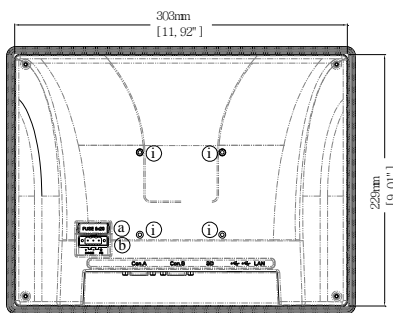
Front View



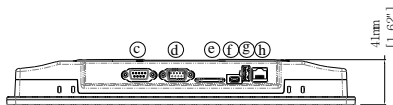
Side View



Cutout Dimensions



Rear View



Bottom View

a	Fuse
b	Power Connector
c	COM1 RS-485 2W/4W, COM3 RS-485 2W (Con.A)
d	COM1 RS-232 (Con.B)
e	SD Card Slot
f	USB Client Port
g	USB Host Port
h	Ethernet Port
i	VESA 75 mm Screw Holes

**PIN Assignment**  
COM1 [RS232] 9 Pin, Male, D-sub

PIN#	COM1 [RS232]
1	
2	RxD
3	TxD
4	
5	GND
6	
7	RTS
8	CTS
9	

## Ordering Information

- MT8121XE3:**  
 12.1" 1024 x 768 IPS LCD HMI, Built-in 256 MB flash memory / 256 MB DDR2 RAM
- RP0081210 (included in package)**  
 12.1" Screen Protective Film

**COM1 / COM3 [RS485] 9 Pin, Female, D-sub**

PIN#	COM1 [RS485]		COM3 [RS485]2W
	2W	4W	
1	Data-	Rx-	
2	Data+	Rx+	
3		Tx-	
4		Tx+	
5	GND(COM1)		
6			
7			Data-
8			Data+
9			GND(COM3)