

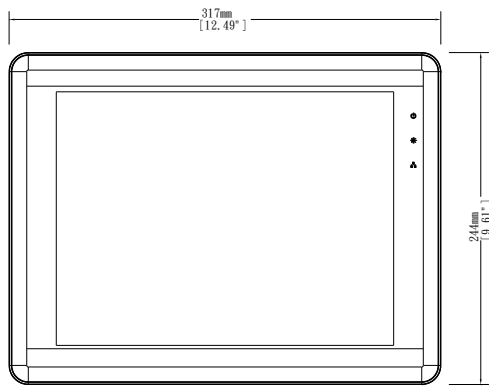
## HMI with 12.1" TFT Display



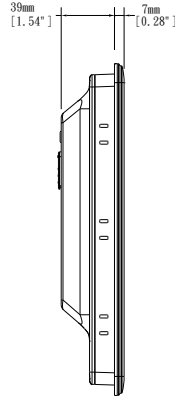
### ◆ Features

- 12.1" 1024 x 768 TFT LCD, LED Backlight
- Slim Design
- Fan-less Cooling System
- Built-in 256 MB Flash Memory
- SD Card Slot for Extension 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 one time
- Built-in Power Isolator
- NEMA4 / IP66 Compliant Front Panel

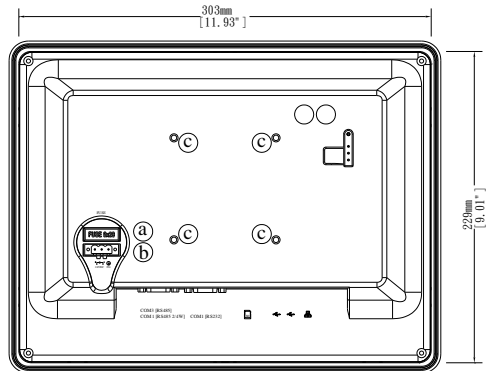
<b>Display</b>	Display	12.1" TFT
	Resolution	1024 x 768
	Brightness (cd/m <sup>2</sup> )	500
	Contrast Ratio	700:1
	Backlight Type	LED
	Backlight Life Time	>50,000 hrs.
	Colors	16.2M
<b>Touch Panel</b>	Type	4-wire Resistive Type
	Accuracy	Active Area Length(X)±2%, Width(Y)±2%
<b>Memory</b>	Flash	256 MB
	RAM	256 MB
<b>Processor</b>		32 bit RISC Cortex-A8 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	800mA@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	Aluminum
	Dimensions WxHxD	317 x 244 x 46 mm
	Panel Cutout	305 x 231 mm
	Weight	Approx. 2.1 kg
	Mount	Panel mount, VESA mount 75 x 75 mm
<b>Environment</b>	Protection Structure	UL Type 4X (indoor use only) / NEMA4 / IP66 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
	UL	cULus Listed
<b>Software</b>		EasyBuilder Pro V4.00.01 or later versions



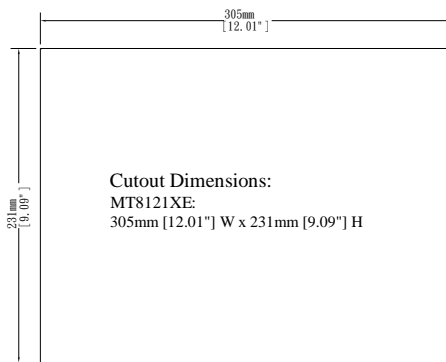
Front View



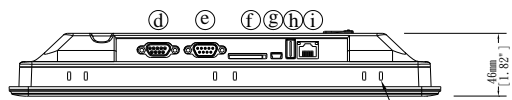
Side View



Rear View



**Cutout Dimensions:**  
 MT8121XE:  
 305mm [12.01"] W x 231mm [9.09"] H



Bottom View

Panel-mounting clamp slots, 12 places

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

**PIN Assignment**

COM1 [RS232] 9 Pin, Male, D-sub

PIN#	Symbol	COM1 [RS232]
1	Not used	
2	RxD	Received Data
3	TxD	Transmitted Data
4	Not used	
5	GND	Ground
6	Not used	
7	RTS	Ready to send output
8	CTS	Clear to send input
9	Not used	

## Ordering Information

**MT8121XE:**

12.1" 1024 x 768 TFT LCD HMI, Built-in 256 MB flash memory / 256 MB DDR2 RAM

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

PIN#	Symbol	COM1 [RS485]		COM3 [RS485]
		2W	4W	
1	Rx-	Data-	Rx-	
2	Rx+	Data+	Rx+	
3	Tx-		Tx-	
4	Tx+		Tx+	
5	GND	GND(COM1)		
6	Not used			
7	Data-			Data-
8	Data+			Data+
9	GND			GND(COM3)