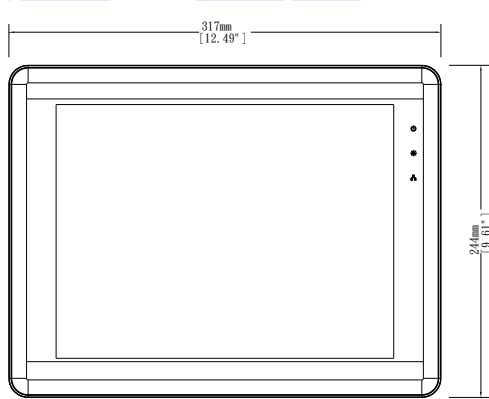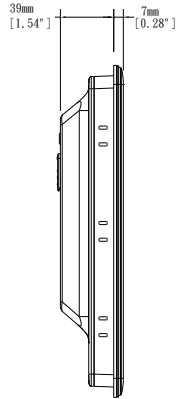# MT8121XE

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 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 one time
- Built-in Power Isolator
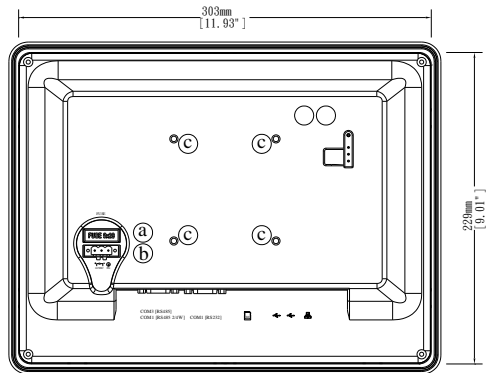- NEMA4 / IP66 Compliant Front Panel

Display	Display	12.1" TFT
	Resolution	1024 x 768
	Brightness (cd/m^2)	500
	Contrast Ratio	700:1
	Backlight Type	LED
	Backlight Life Time	>50,000 hrs.
	Colors	16.2M
Touch Panel	Type	4-wire Resistive Type
	Accuracy	Active Area Length(X)±2%, Width(Y)±2%
Memory	Flash	256 MB
	RAM	256 MB
Processor		32 bit RISC Cortex-A8 1GHz
I/O Port	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
RTC		Built-in
Power	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)
Specification	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
Environment	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)
Certificate	CE	CE marked
	UL	cULus Listed
Software		EasyBuilder Pro V4.00.01 or later versions

WEINTEK

Front View

Side View

317mm [12.49"]

244mm [9.61"]

39mm [1.54"] 7mm [0.28"]

303mm [11.93"]

229mm [9.01"]

Rear View

305mm [12.01"]
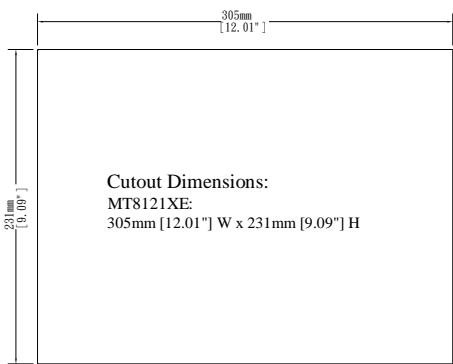
231mm [9.09"]

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

COM1 [RS485]
COM1 [RS485 2/4W] COM1 [RS232]

40mm [1.82"]

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

Ordering Information

❑ **MT8121XE:**
12.1" 1024 x 768 TFT LCD HMI, Built-in 256 MB flash memory / 256 MB DDR2 RAM

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	

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)