



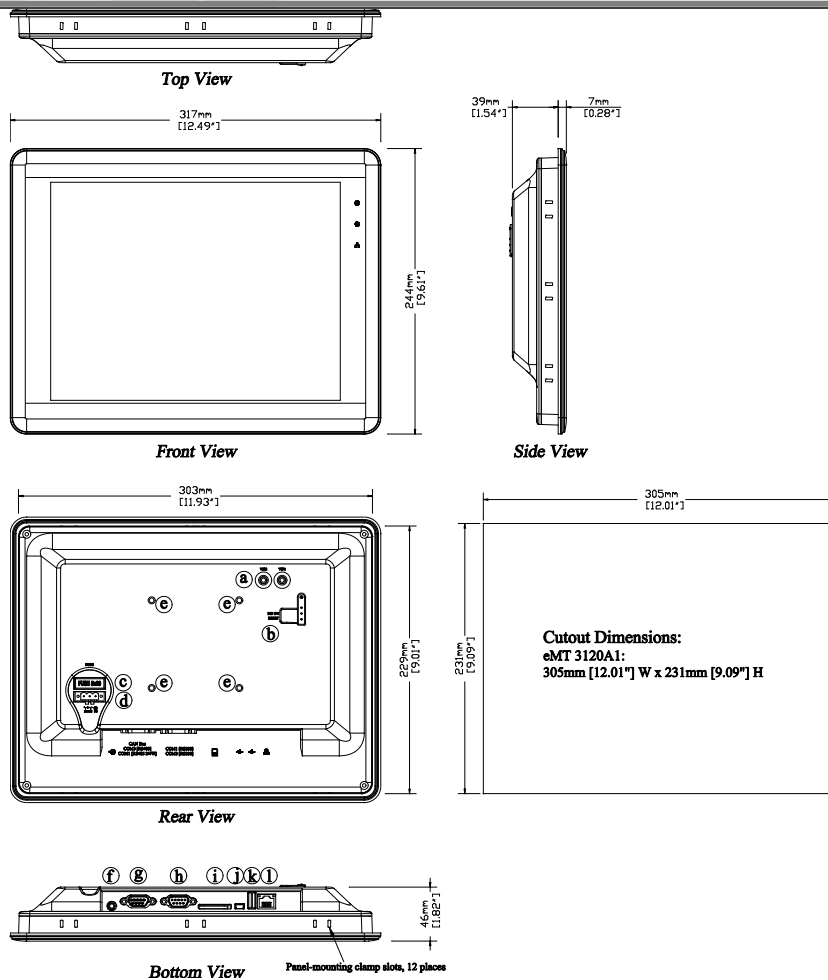
## HMI with 12.1" X VGA TFT Display

### Feature

- Aluminum Housing and Brand New Color & Design
- 12.1" 1024 x 768 TFT Industrial Grade LCD
- Long Life LED Back Light with Ceramics Package
- Fan-less Cooling System
- Built- in 256 MB Flash Memory and RTC
- SD Card Slot for Expansion of Storage
- One USB Host Port and one USB Client Port
- COM1 and COM3 RS-485 & CAN Bus Built-in Isolation
- COM1 and COM3 RS-485 2W supports MPI 187.5K, please use one at one time
- CAN Bus port supports CANopen Protocol
- Video Input ports support NTSC and PAL
- 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 CPU 800MHz
<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-232/RS-485 2W*
	RS-485 Dual Isolation	Yes
	CAN Bus	Yes
	HDMI	N/A
	Audio Output	Audio Line Out – 3.5 mm jack x 1
<b>RTC</b>	Video Input	NTSC/PAL RCA x 2
		Built-in
<b>Power</b>	Input Power	24±20%VDC
	Power Isolation	Built-in
	Power Consumption	850m A@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	NEMA 4 / IP66 Compliant Front Panel
	Storage Temperature	-20° ~ 70°C (-4° ~ 158°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

\*Only Tx & Rx (no RTS/CTS) may be used for COM1 RS-232 when COM3 RS-232 is also used.



<b>a</b>	Video Input Port x 2	<b>g</b>	COM1 RS-485, COM3 RS-485, CAN Bus
<b>b</b>	DIP SW & Reset Button	<b>h</b>	COM1 RS-232, COM3 RS-232
<b>c</b>	Fuse	<b>i</b>	SD Card Slot
<b>d</b>	Power Connector	<b>j</b>	USB Client Port
<b>e</b>	VESA 75 mm Screw Holes	<b>k</b>	USB Host Port
<b>f</b>	Line Out	<b>l</b>	Ethernet Port

## Ordering Information

- eMT3120A**  
12.1" TFT LCD HMI, 256 MB flash memory / 256 MB RAM on board, Video Input Port RCA x 2
- FLZ485000**  
Multi-Connector cable COM1[485] / COM3[485] / CAN Bus
- FLZ232000**  
Multi-Connector cable COM1[232] / COM3[232]

### Pin Assignment:

#### COM1 / COM3 [RS232] 9 Pin, Male, D-sub

PIN#	Symbol	COM1 [RS232]	COM3 [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	Transmitted Data
8	CTS	Clear to send	Received Data
9	Not used		

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

PIN#	Symbol	COM1 [RS485]2w	COM1 [RS485]4w	COM3 [RS485]	CAN Bus
1	Rx-	Data-	Rx-		
2	Rx+	Data+	Rx+		
3	Tx-		Tx-		
4	Tx+		Tx+		
5	GND	Ground			
6	Data-			Data-	
7	CAN_L				CAN_L
8	CAN_H				CAN_H
9	Data+			Data+	