

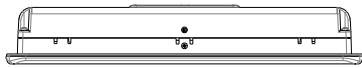
## HMI with 12.1" IPS Display



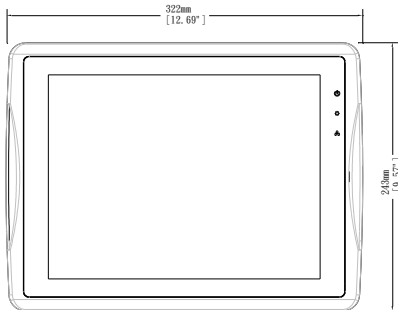
### Feature

- 12.1" 1024x768 IPS LCD, LED Backlight
- Fan-less Cooling System
- Built-in 128MB 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 a time
- Built-in Power Isolation
- NEMA4/IP65 Compliant Front Panel

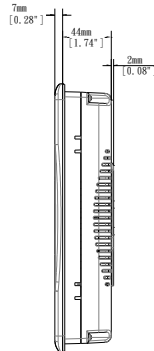
|               |                                 |                                            |
|---------------|---------------------------------|--------------------------------------------|
| Display       | Display                         | 12.1" IPS                                  |
|               | Resolution (WxH dots)           | 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)                      |
| Touch Panel   | Type                            | 4-wire Resistive Type                      |
|               | Accuracy                        | Active Area Length(X)±2%, Width(Y)±2%      |
| Memory        | Flash                           | 128 MB                                     |
|               | RAM                             | 256 MB                                     |
| Processor     |                                 | 32-bit RISC 600MHz                         |
| I/O Port      | SD Card                         | 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                                        |
| RTC           |                                 | Built-in                                   |
| Power         | Input Power                     | 24±20%VDC                                  |
|               | Power Isolation                 | Built-in                                   |
|               | Power Consumption               | 1.5A@24VDC                                 |
|               | Voltage Resistance              | 500VAC (1 min.)                            |
|               | Isolation Resistance            | Exceed 50MΩ @ 500VDC                       |
|               | Vibration Endurance             | 10 to 25Hz(X,Y,Z direction 2G 30 minutes)  |
| Specification | PCB Coating                     | Yes                                        |
|               | Enclosure                       | Plastic                                    |
|               | Dimensions WxHxD                | 322 x 243 x 51mm                           |
|               | Panel Cutout                    | 305 x 231 mm                               |
|               | Weight                          | Approx.2.0 kg                              |
|               | Mount                           | Panel mount                                |
| Environment   | Protection Structure            | IP65                                       |
|               | 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                                  |
| Software      |                                 | EasyBuilder Pro V4.00.01 or later versions |



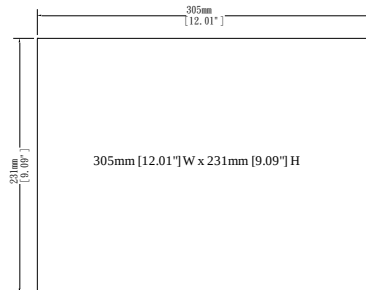
Top View



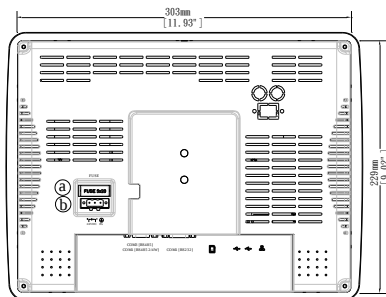
Front View



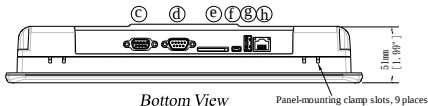
Side View



Cutout Dimensions



Rear View



Bottom View

|          |                                   |
|----------|-----------------------------------|
| <b>a</b> | Fuse                              |
| <b>b</b> | Power Connector                   |
| <b>c</b> | COM1 RS-485 2W/4W, COM3 RS-485 2W |
| <b>d</b> | COM1 RS-232                       |
| <b>e</b> | SD Card Slot                      |
| <b>f</b> | USB Client Port                   |
| <b>g</b> | USB Host Port                     |
| <b>h</b> | Ethernet Port                     |

#### 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

#### □ MT8121iE1:

12.1" 1024x768 IPS LCD HMI, Built-in 128MB flash memory / 256MB RAM

##### 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)       |