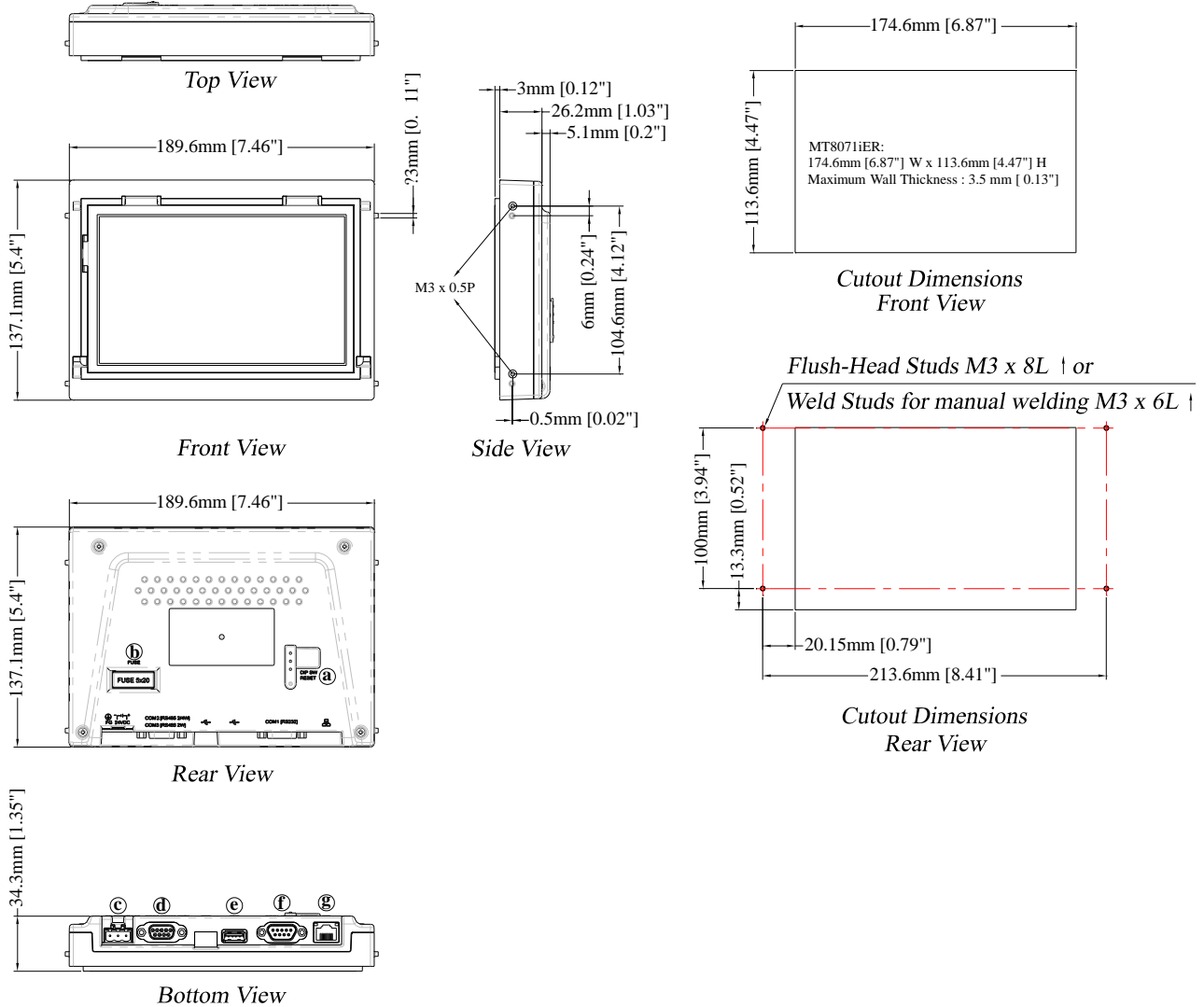# WEINTEK

# MT8071iER1

## Rear-Mount HMI

### Feature

- 7" 800 x 480 TFT LCD, LED Backlight
- Highly flexible customized exterior design
- Easy installation in embedded application, the mounting brackets can fit different wall thicknesses
- Perfectly flush with control plate at front, dust-proof and waterproof flat cabinet
- Fan-less Cooling System
- COM2 and COM3 RS-485 support MPI 187.5K, please use one at one time
- PCB coating process ensures high reliability to resist from corrosion in harsh environment.
- Built-in Power Isolation
- NEMA4 / IP65 (With Proper Overlay Installed)

| | | |
|---|---|---|
| **Display** | Display | 7" TFT |
| | Resolution | 800 x 480 |
| | Brightness (cd/m$^2$) | 400 |
| | Contrast Ratio | 800:1 |
| | Backlight Type | LED |
| | Backlight Life Time | >30,000 hrs. |
| | Colors | 16.7M |
| | LCD Viewing Angle (T/B/L/R) | 80/60/80/80 |
| **Touch Panel** | Type | 4-wire Resistive Type |
| | Accuracy | Active Area Length(X)±2%, Width(Y)±2% |
| **Memory** | Flash | 128 MB |
| | RAM | 128 MB |
| **Processor** | | 32-bit RISC 600MHz |
| **I/O Port** | SD Card Slot | N/A |
| | USB Host | USB 2.0 x 1 |
| | USB Client | N/A |
| | Ethernet | 10/100 Base-T x 1 |
| | COM Port | COM1: RS-232,COM2: RS-485 2W/4W,COM3: RS-485 2W |
| | RS-485 Dual Isolation | N/A |
| | 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 | 450mA@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 | Plastic |
| | Dimensions WxHxD | 189.6 x 137.1 x 34.3 mm |
| | Panel Cutout | 174.6 mm x 113.6 mm |
| | Panel Thickness | 1.5 mm [0.06"] ~ 3.5 mm [0.13"] |
| | Weight | Approx. 520 g |
| | Mount | Rear mount |
| **Environment** | Protection Structure | NEMA4 / 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 V4.10.04 or later versions |

*Note: Protection Structure IP65 can be expected if you affix the Overlay (user-prepared) on the screen of the unit and the surroundings. Weintek does not guarantee the protective structure.
IP65: Dust tight, protected against water jets.

## Dimensions

*Top View*

*Front View*

3mm [0.12"]
26.2mm [1.03"]
5.1mm [0.2"]
23mm [0. 11"]
M3 x 0.5P
6mm [0.24"]
104.6mm [4.12"]
0.5mm [0.02"]

189.6mm [7.46"]
137.1mm [5.4"]

*Side View*

174.6mm [6.87"]
113.6mm [4.47"]

MT8071iER:
174.6mm [6.87"] W x 113.6mm [4.47"] H
Maximum Wall Thickness : 3.5 mm [ 0.13"]

*Cutout Dimensions*
*Front View*

189.6mm [7.46"]
137.1mm [5.4"]

*Rear View*

Flush-Head Studs M3 x 8L ↕ or
Weld Studs for manual welding M3 x 6L ↕

100mm [3.94"]
13.3mm [0.52"]
20.15mm [0.79"]
213.6mm [8.41"]

*Cutout Dimensions*
*Rear View*

34.3mm [1.35"]

ⓒ ⓓ ⓔ ⓕ ⓖ

*Bottom View*

| | | | |
|---|---|---|---|
| **a** | DIP SW | **e** | USB Host Port |
| **b** | Fuse | **f** | COM1 RS232 |
| **c** | Power Connector | **g** | Ethernet Port |
| **d** | COM2 RS-485 2W/4W, COM3 RS-485 2W | **h** | |

## Ordering Information

❑ **MT8071iER1:**

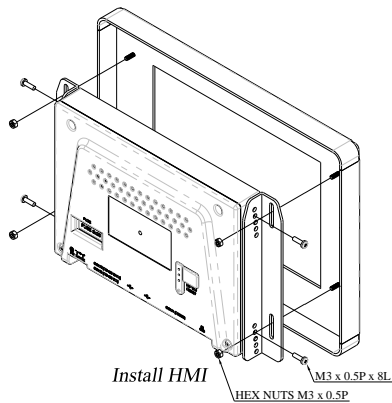7" 800 x 480 TFT LCD HMI, Built-in 128 MB flash memory / 128 MB DDR2 RAM on board

**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 | |

**COM2 / COM3 [RS485] 9 Pin, Female, D-sub**

| PIN# | COM2 [RS485] 2W | COM2 [RS485] 4W | COM3 [RS485] 2W |
|---|---|---|---|
| 1 | Data- | Rx- | |
| 2 | Data+ | Rx+ | |
| 3 | | Tx- | |
| 4 | | Tx+ | |
| 5 | GND | | |
| 6 | | | Data- |
| 7 | | | |
| 8 | | | |
| 9 | | | Data+ |

## Installation

*Install HMI*

M3 x 0.5P x 8L
HEX NUTS M3 x 0.5P

*Choose the mounting holes that match your panel thickness .*

1.5mm [0.06"]
1.9mm [0.07"]
2mm [0.08"]
2.4mm [0.09"]
2.5mm [0.1"]
2.9mm [0.11"]
3mm [0.12"]
3.5mm [0.13"]

Ø4mm [Ø0.16"]

Panel Thickness Range
1.5mm [0.06"]
3.5mm [0.13"]

Ø3.7mm [Ø0.15"]

8.1mm [0.32"]      *Cutout hole*    wall      (9.85mm [0.39"])

11.95mm [0.47"]

(13mm [0.51"])
138.55mm [5.45"]

*Overlay*

192.55mm [7.58"]

*Install Overlay*
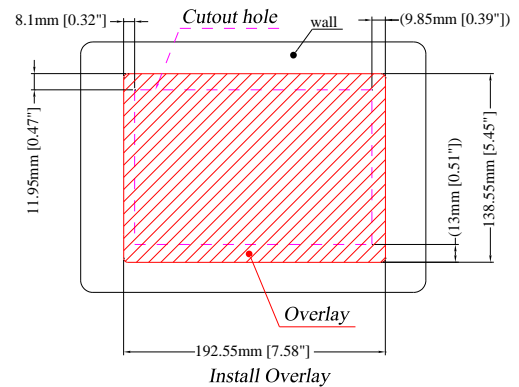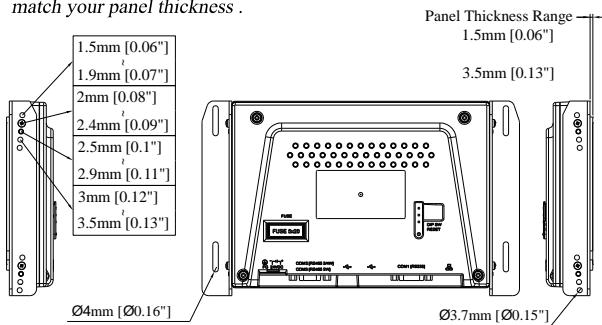
1. Around the cutout on the control cabinet, draw the reference lines for positioning the overlay.
2. Select the mounting holes according to the wall thickness of control cabinet and secure the mounting brackets onto both sides of the HMI unit.
   Wall Thickness: 1.5 mm [0.06"] ~ 3.5 mm [0.13"]
3. Secure the HMI to the cabinet by four studs.
4. Affix the overlay (user-prepared) to the cabinet front surface.