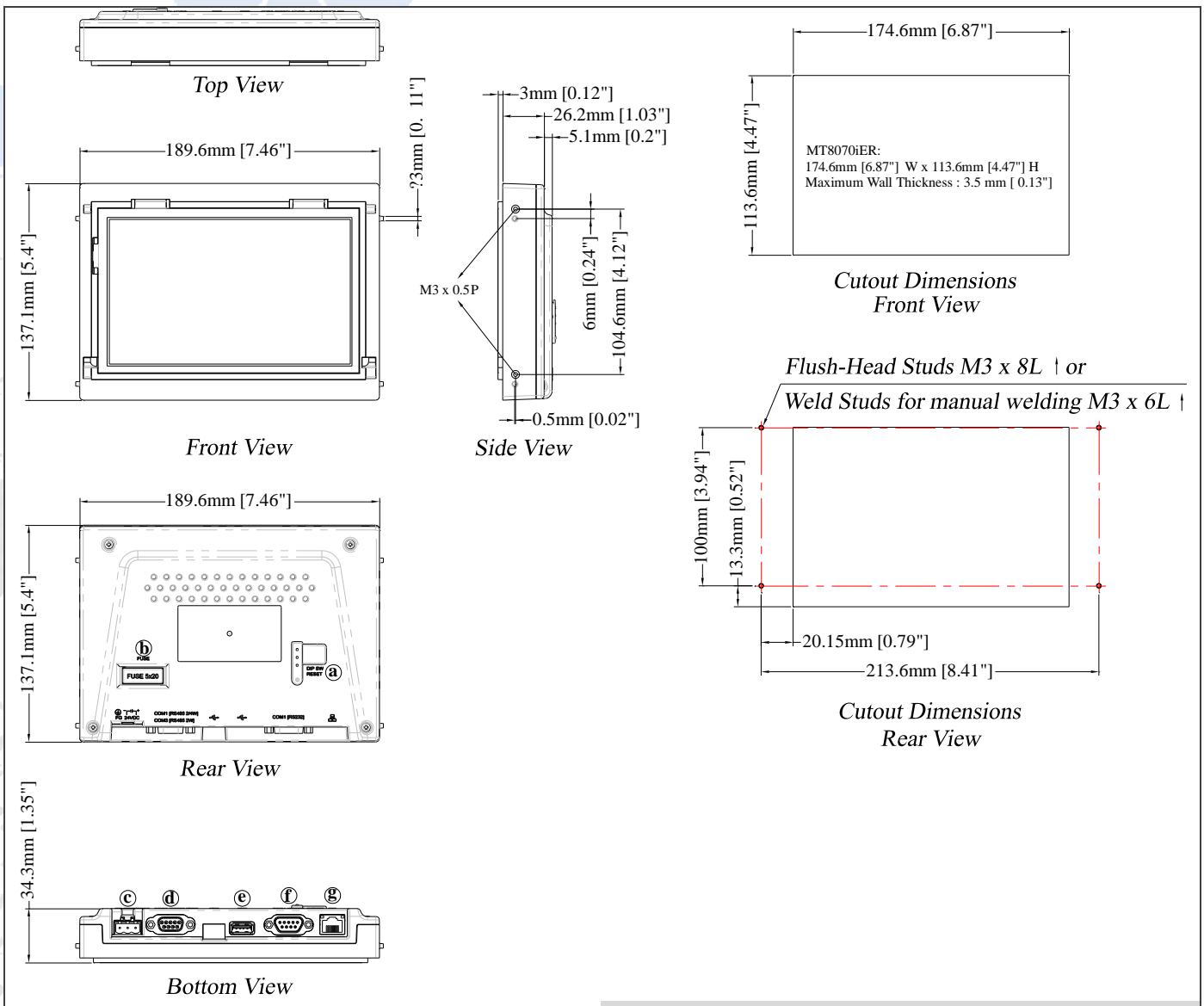# MT8070iER

Rear-Mount HMI

◆ Features

- 7" 800x480 TFT LCD, LED Backlight
- The front surface flush with the control box.
- No dirt-collecting edges and corners, very easy to clean.
- Selectable mounting holes that match different panel thicknesses.
- PCB coating process ensures high reliability to resist from corrosion in harsh environment.
- Com1 / Com3 RS485 dual isolation design ensures reliable operation in complex grounding application.
- Fan-less Cooling System
- COM1 and COM3 [RS485]2W support MPI

Display	Display	7"TFT
	Resolution	800 x 480
	Brightness	350 cd/m^2
	Contrast Ratio	500:1
	Backlight Type	LED
	Backlight Life Time	>30,000 hr.
	Display Colors	16M
Touch Panel	Type	4-wire Resistive Type
	Accuracy	Active Area Length(X)±2%, Width(Y)±2%
Memory	Flash	128 MB
	RAM	128 MB
Processor		32Bit RISC Cortex A8 600MHz
I/O Port	USB Host	USB 2.0 x 1
	Ethernet	1 RJ45 port (10/100 Base-T)
	COM Port	Com1: RS232 / RS485 2w/4w, Com3: RS485 2w
RTC		Built-in
Power	Input Power	24±20% VDC
	Power Consumption	350mA @ 24VDC
	Voltage Resistance	500VAC (1 min)
	Isolation Resistance	Exceed 50MΩ @ 500VDC
	Vibration Endurance	10 to 25Hz(X,Y,Z direction 2G 30 minutes)
Specification	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. 1.15 lbs
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% @ 40°C (non-condensing)
	PCB Coating	Yes
Certificate	CE	CE marked
Software		EasyBuilder Pro V3.00.01 or later versions

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

WEINTEK

Top View

Front View

189.6mm [7.46"]

137.1mm [5.4"]

23mm [0. 11"]

Side View

3mm [0.12"]
26.2mm [1.03"]
5.1mm [0.2"]

M3 x 0.5P

6mm [0.24"]
104.6mm [4.12"]
0.5mm [0.02"]

Cutout Dimensions Front View

174.6mm [6.87"]

113.6mm [4.47"]

MT8070iER:
174.6mm [6.87"] W x 113.6mm [4.47"] H
Maximum Wall Thickness : 3.5 mm [0.13"]

Rear View

189.6mm [7.46"]

137.1mm [5.4"]

FUSE 5x20

DIP SW RESET

FG 24VDC   COM1 [RS485 2W/4W]   COM1 [RS232]
COM3 [RS485 2W]

Cutout Dimensions 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"]

Bottom View

34.3mm [1.35"]

ⓒ ⓓ ⓔ ⓕ ⓖ

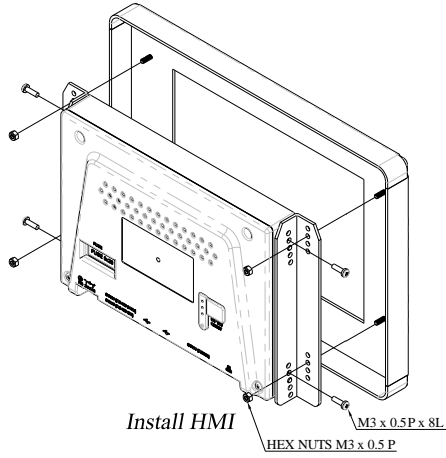| a	DIP SW & Reset Button	e	USB Host Port
b	Fuse	f	Com1 RS232
c	Power Connector	g	Ethernet Port
d	Com1 RS485 2w/4w, Com3 RS-485 2w	h	

Ordering Information

❑ **MT8070iER:**
7" 800x480 TFT LCD HMI, built-in 128MB flash memory / 128MB 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	Signal 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	GND1	Ground1		
6	Not used			
7	Data-			Data-
8	Data+			Data+
9	GND2			Ground2

MT8070iER Installation

Install HMI

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

Choose the mounting holes that match your panel thickness .

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

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"]

Ø3.5mm [Ø0.14"]

Ø3.7mm [Ø0.15"]

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

11.95mm [0.47"]

(13mm [0.51"])

Overlay

Install Overlay