TPD-433-M2

TPD-433F-H

Features

- Excellent C/P ratio (cost/performance)
- High-resolution color touch screen
- PoE (Power over Ethernet)
- Multiple serial communication interfaces
- RTC (Real Time Clock)
- GUI design
- Free HMIWorks development tool
- Supports the popular C programming language and Ladder Designer
- Supports the custom communication protocol (C language)
- Modbus TCP, Modbus RTU and DCON protocol
- ESD Protection: 4 kV
- Operating temperature: -20 ~ 50°C

Introduction

TPD-433F-H/TPD-433-M2 is a series of touch HMI and designed for building and home automation. TPD 4.3 inch series is equipped with high resolution TFT color touch screen and fits in with regular electrical wall-mount outlet. Besides, it is seamlessly integrated with rich I/O modules and presents beautiful, flexible and user-defined picture frame. In short, it is the best choice to upgrade the mechanical switch to intelligent control pads.

For PLC users, HMIWorks provides Ladder Designer, and for IT users, C language environment is provided. Especially, it only takes no more than 30 minutes to learn how to create an application program of TPD-series devices when using Ladder Designer. It supports Modbus TCP/RTU protocols so that it enables remote control of I/O modules and integration with SCADA software. With all the features provided, TPD-series touch HMI Devices must be the most cost effective HMI Device ever been in the market.

### Applications
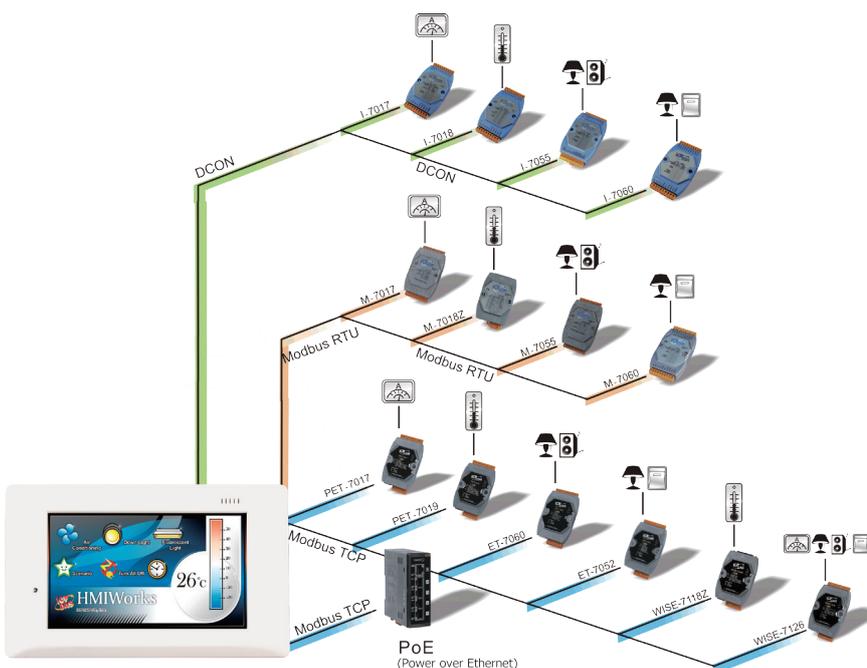
TPD-433F-H with External Wall Box EWB-T43F

TPD-433F-H with Outlet Box OB140F

The space between the Ethernet plug and the bottom of the external wall box is too small to bend the coated Ethernet plug

▪ Specifications

Models	TPD-433F-H	TPD-433-M2
CPU Module		
CPU	32-bit RISC CPU	
Memory Expansion	16 MB SDRAM / 16 MB Flash	
Real Time Clock (RTC)	Yes	
Buzzer	Yes	
Rotary Switch (0~9)	Yes	
Communication Interface		
COM1	RS-485 (including Self-Tuner)	
COM2	RS-232 (3-pin)	
Ethernet	RJ-45 x 1, 10/100 Base-TX	
USB 1.1 Client	Firmware updates only	
MMI (Main Machine Interface)		
LCD	4.3" TFT(Resolution 480 X 272 X 16), defective pixels <= 3	
Backlight Life	20,000 hours	
Brightness	400 cd/m2	
Touch Panel	Yes	
LED Indicator	Yes	
Reset Button	Yes	
Electrical		
Powered from Terminal Block	+12 ~ 48 VDC	
Powered from PoE	IEEE 802.3af, Class1 (48 V)	
Power Consumption	2.5 W	
Mechanical		
Dimensions (W x L x H)	140 mm x 87 mm x 42 mm	
Installation	Wall Mount	
Environmental		
Operating Temperature	-20 ~ +50°C	
Storage Temperature	-30 ~ +80°C	
Ambient Relative Humidity	10 ~ 90% RH, non-condensing	

▪ Pin Assignments

RxD2 TxD2 GND D1- D1+ GND VDC F.G.
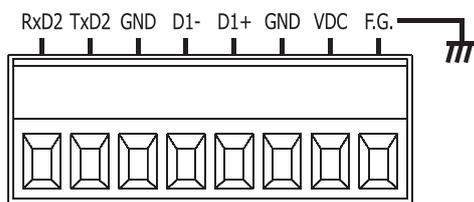
▪ Appearance

TPD-433F-H/433-M2 Front View

LED
4.3" TFT LCD with Touch Panel
Buzzer

TPD-433-M2 Rear View

Ethernet
Rotary Switch
RS-485
USB

TPD-433F-H Rear View

Ethernet
Rotary Switch
RS-485
USB
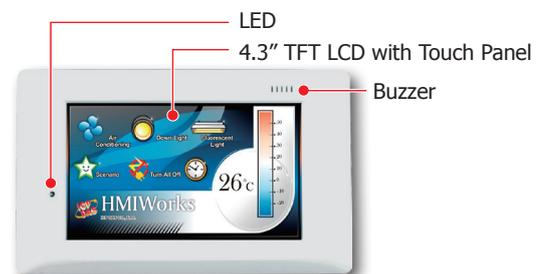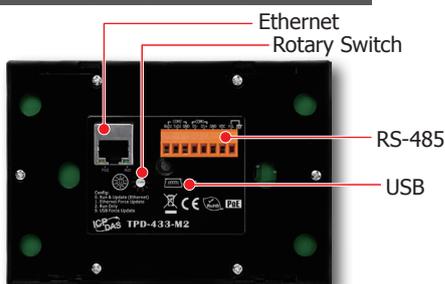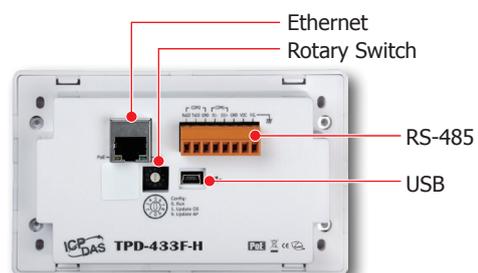
Dimensions (Units: mm)

TPD-433-M2
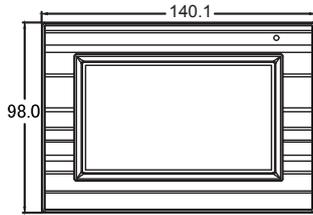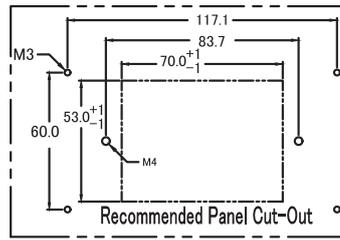
| 140.1	Recommended Panel Cut-Out	30.0		Top View
Front View	Wall Mounting	Left View	Right View	Bottom View

98.0 · 117.1 · 83.7 · 70.0$^{+1}_{-1}$ · 53.0$^{+1}_{-1}$ · 60.0 · M3 · M4 · 14.9
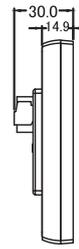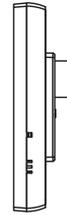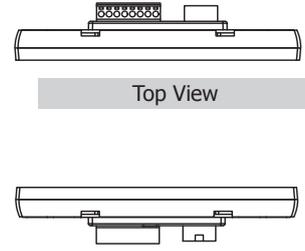
TPD-433F-H
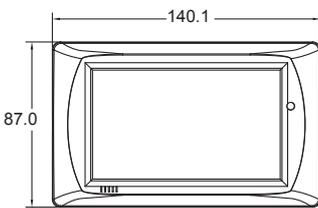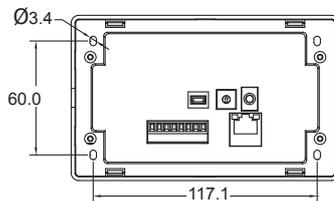
140.1	Ø3.4	30 11		120
Front View	Rear View	Left View	Right View	Bottom View
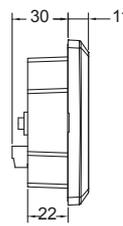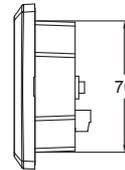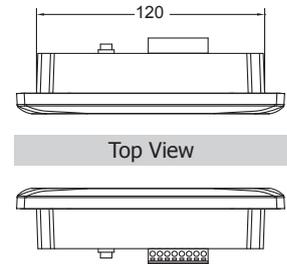
87.0 · 60.0 · 117.1 · 22 · 70 · Top View

Ordering Information

TPD-433F-H CR	4.3" Touch HMI device with RS-485, RS-232 (3 pin), USB, RTC, Ethernet (RoHS)
TPD-433F-M2 CR	4.3" Touch HMI device with RS-485, RS-232 (3 pin), USB, RTC, Ethernet (Multi Panel, RoHS)

Accessories

	CA-USB10	USB to 5P Mini-USB, 28AWG, 1.5 m
	1C016	2.4 mm Screw driver
	MDR-60-24 CR	24 VDC/2.5 A, 60 W Power Supply with DIN-Rail Mounting (RoHS)
	DIN-KA52F CR	24 VDC/1.04 A, 25 W Power Supply with DIN-Rail Mounting (RoHS)
	EWB-T43F	External Wall Box for TPD-433F-H
	OB140F	Outlet Box for TPD-433F-H
	OB140FP	Plastic outlet Box for TPD-433F-H