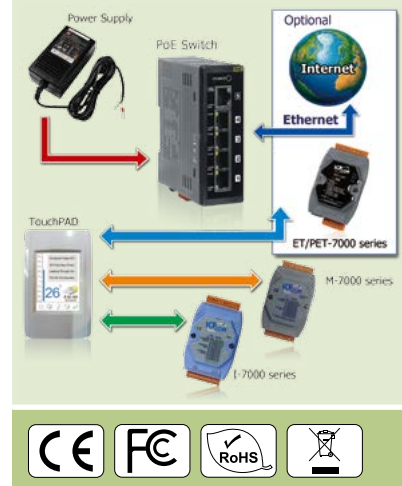


### Features

- Excellent C/P ratio (cost/performance)
- High-resolution color touch screen
- PoE (Power over Ethernet)
- RS-485 (including Self-Tuner)
- RTC (Real Time Clock)
- GUI design
- Free HMIWorks development tool
- Supports C programming language and Ladder Designer
- Supports the custom communication protocol (C language)
- Modbus TCP/RTU protocol
- ESD Protection: 4 kV
- Operating temperature: -20 ~ 70°C

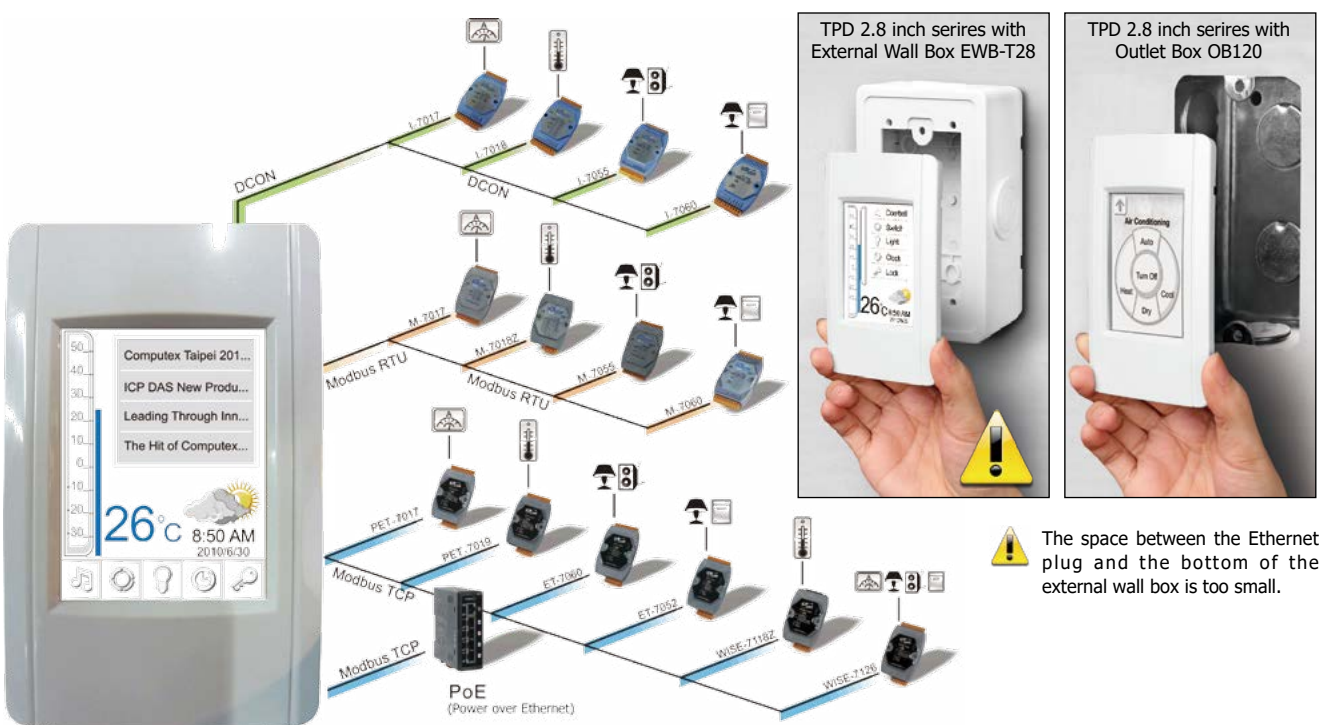


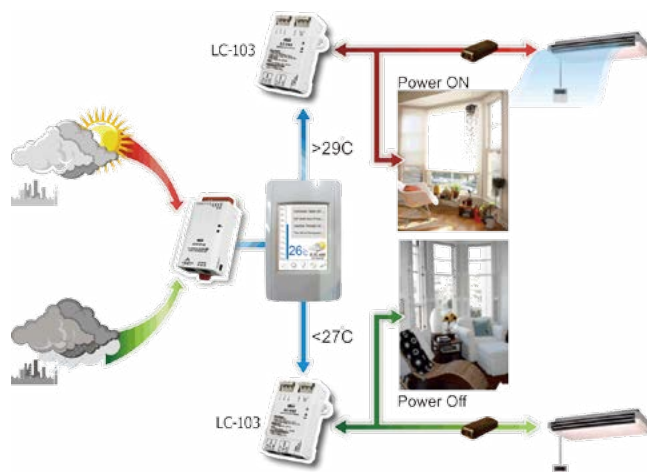
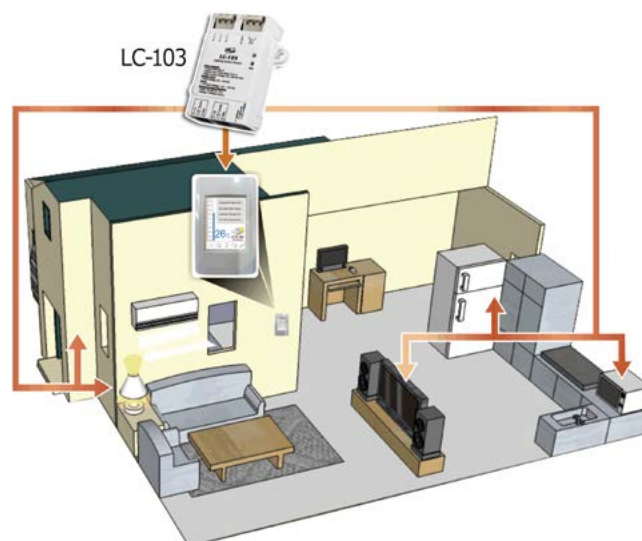
### Introduction

TPD 2.8 inch series is a series of tiny touch HMI and designed for building and home automation. TPD 2.8 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. Moreover, we provide redundant solutions in our PoE version, TPD-283-H of TPD-series HMI devices. With all the features provided, TPD-series touch HMI Devices must be the most cost effective HMI Device ever been in the market.

### Applications

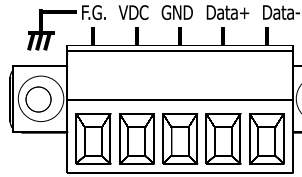


**Temperature Control Example**

**Intelligent Building Example**

**Specifications**

Models	TPD-280-H	TPD-280U-H	TPD-283-H	TPD-283U-H
<b>CPU Module</b>				
CPU	32-bit RISC CPU			
Memory Expansion	-	16 MB SDRAM / 16 MB Flash	-	16 MB SDRAM / 16 MB Flash
Real Time Clock (RTC)	-	Yes	-	Yes
Buzzer	Yes			
Rotary Switch (0~9)	Yes			
<b>Communication Interface</b>				
Serial Port	RS-485 (including Self-Tuner)		-	RS-485 (including Self-Tuner)
Ethernet	-			
USB 1.1 Clinet	-	Firmware update only	-	Firmware update only
<b>MMI (Main Machine Interface)</b>				
LCD	2.8" TFT (Resolution 240 x 320 , 65535 colors), defective pixels <= 3			
Backlight Life	20,000 hours			
Brightness	160 cd/m2			
Touch Panel	Resistive Touch			
Reset Button	Yes			
<b>Electrical</b>				
Powered from Terminal Block	+12 ~ 48 VDC		-	+12 ~ 48 Vdc
Powered from PoE	-		IEEE 802.3af, Class1 (48 V)	
Power Consumption	1.5 W			
<b>Mechanical</b>				
Dimensions (W x L x H)	119 mm x 76 mm x 33 mm	119 mm x 76 mm x 33 mm	119 mm x 76 mm x 32 mm	119 mm x 76 mm x 33 mm
Installation	Wall Mount			
Ingress Protection	Front Panel: IP40			
<b>Environmental</b>				
Operating Temperature	-20 ~ +70°C			
Storage Temperature	-30 ~ +80°C			
Ambient Relative Humidity	10 ~ 90% RH, non-condensing			

## Pin Assignments

TPD-280-H/TPD-280U-H/TPD-283U-H

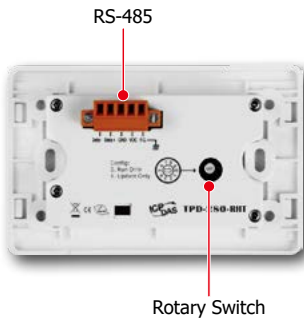


## Appearance

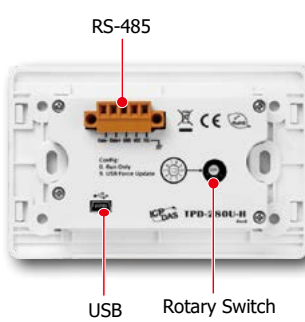
Front View



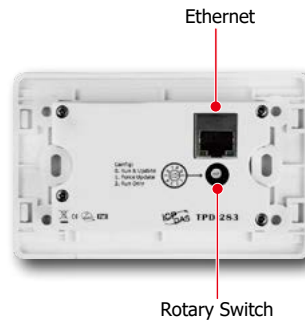
TPD-280-H Rear View



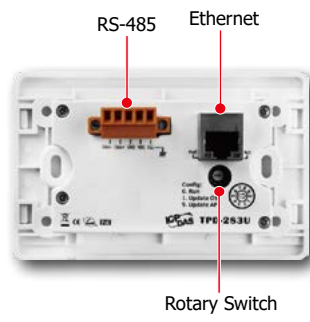
TPD-280U-H Rear View



TPD-283-H Rear View

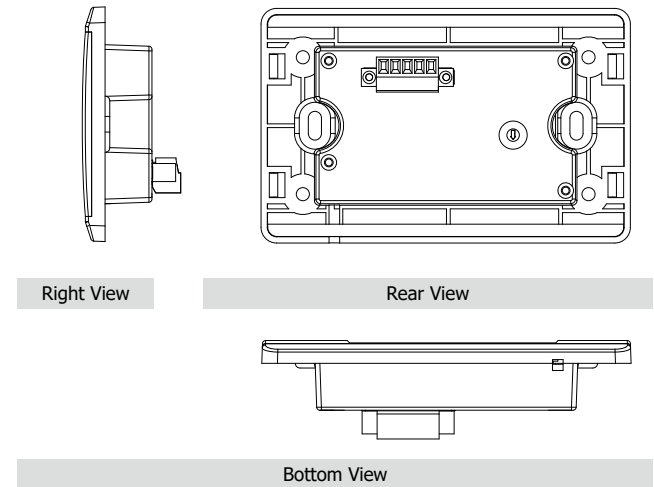
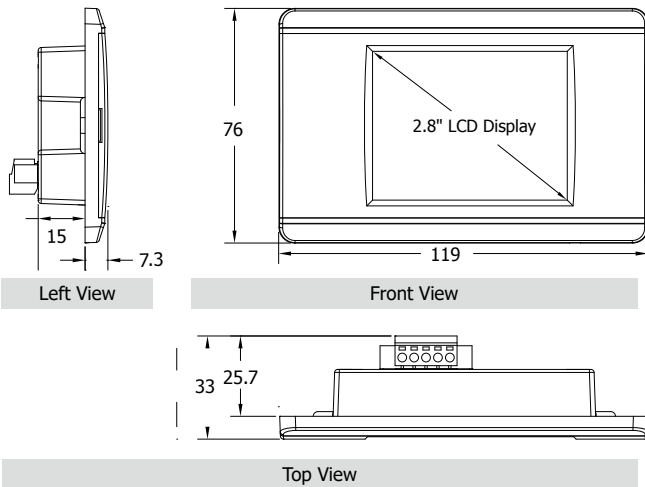


TPD-283U-H Rear View

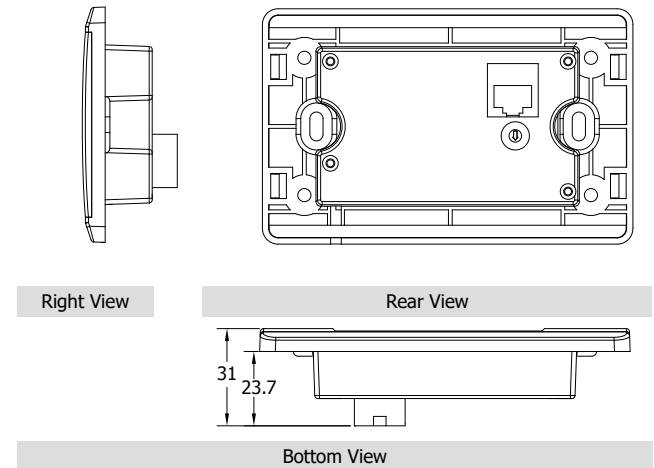
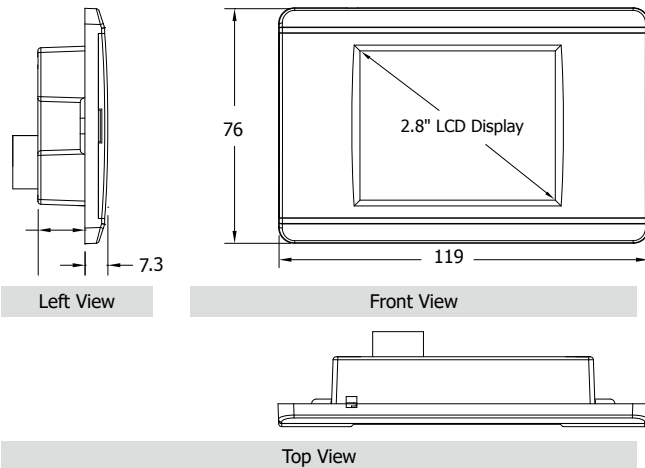


## Dimensions (Units: mm)

TPD-280-H/TPD-280U-H



TPD-283-H/TPD-283U-H



## Ordering Information

TPD-280-H CR	2.8" Touch HMI device with RS-485 (RoHS)
TPD-280U-H CR	2.8" Touch HMI device with RS-485, USB download, RTC (RoHS)
TPD-283-H CR	2.8" Touch HMI device with Ethernet, PoE (RoHS)
TPD-283U-H CR	2.8" Touch HMI device with RS-485, RTC, Ethernet, PoE (RoHS)

## Accessories

	1C016	2.4 mm Screw driver
	NS-208PSE CR	Unmanaged Industrial PoE (Power over Ethernet) Ethernet Switch (RoHS)
	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-T28	External Wall Box for TPD 2.8 inch series
	EWB-T28-BK	External Wall Box for TPD 2.8 inch series (Black)
	OB120	Outlet Box for TPD 2.8 inch series and TPD-430/ TPD-433 Devices