

TPD-280

TPD-280U

TPD-283/TPD-283-BK

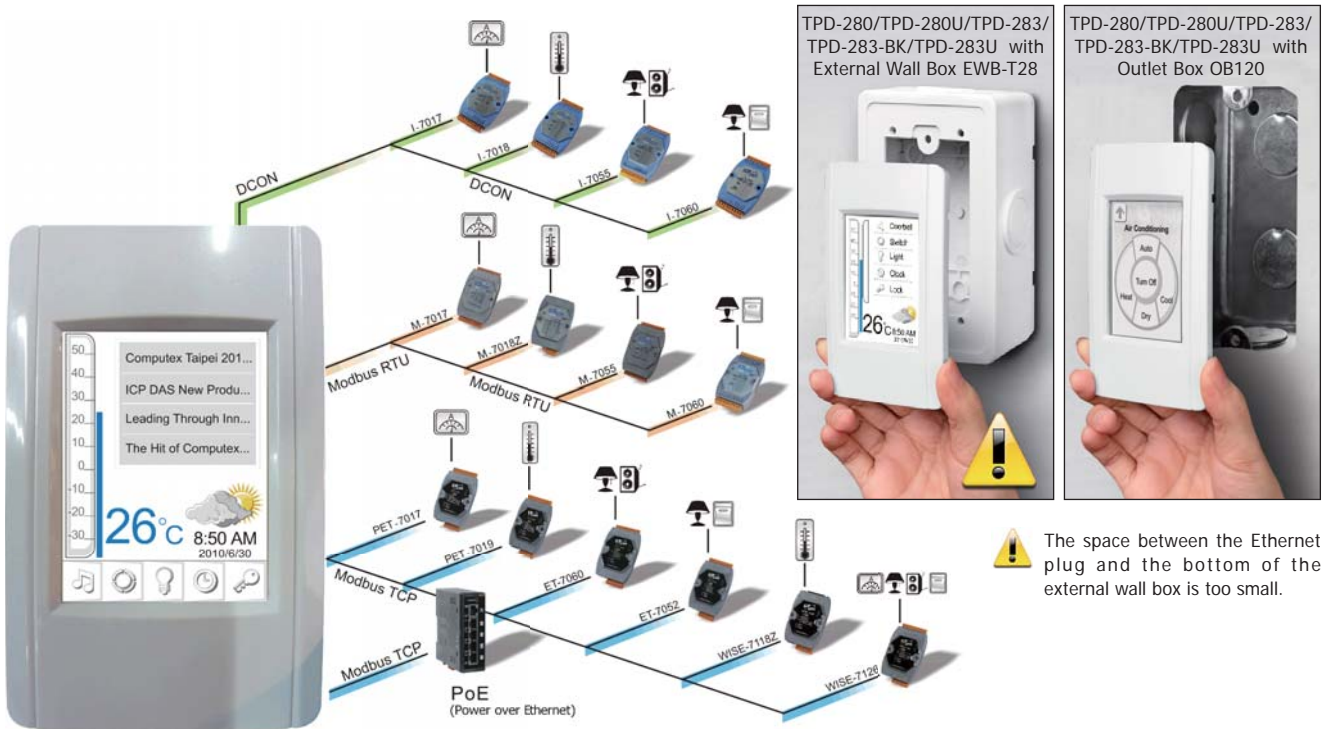
TPD-283U

### Introduction

TPD-280/TPD-280U/TPD-283/TPD-283-BK/TPD-283U, is a series of tiny touch HMI and designed for building and home automation. TPD-280/TPD-280U/TPD-283/TPD-283-BK/TPD-283U 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/ TPD-283-BK, 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



! The space between the Ethernet plug and the bottom of the external wall box is too small.

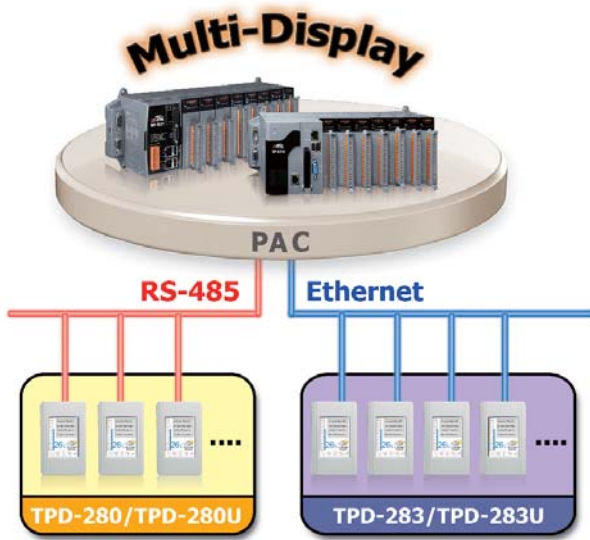
### Features

- 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 the popular C programming language
- Supports Ladder Designer
- Modbus TCP protocol
- ESD Protection: 4 kV
- Operating temperature: -20 ~ 70°C

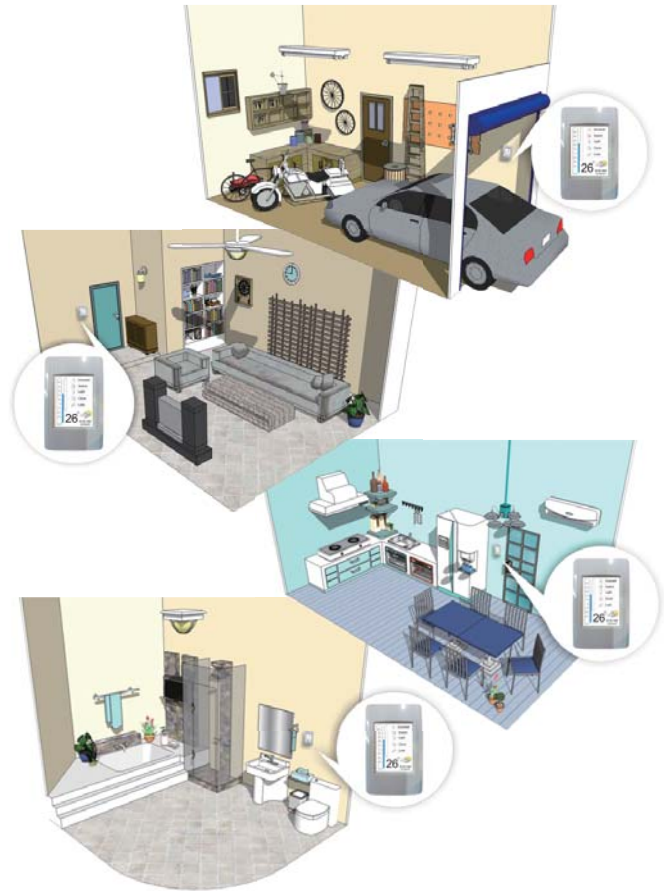


**Applications**

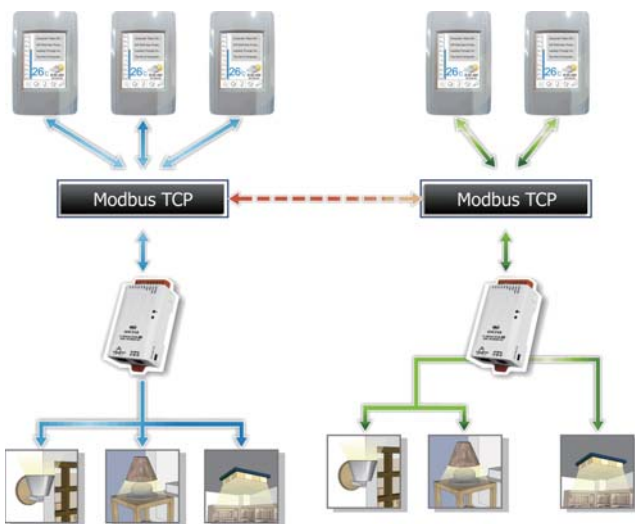
**Multi-Display**



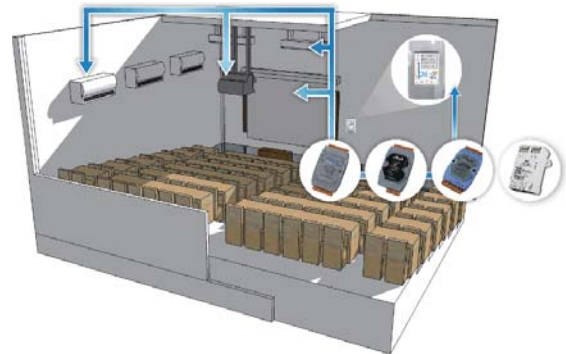
**TouchPAD Anywhere**



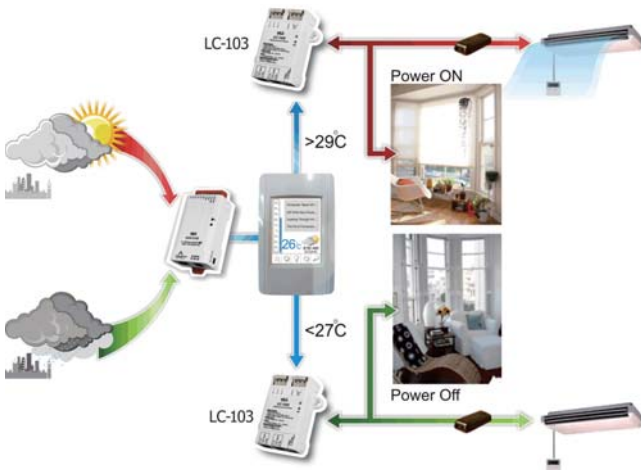
**Single-way, Two-way, Multi-way Switches Example**



**Classroom Automation Example**



**Temperature Control Example**



**Intelligent Building Example**



1

Touch HMI Devices

2

TPD Series

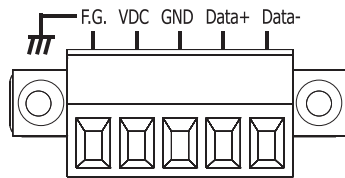
TPD-280/TPD-280U/TPD-283/TPD-283-BK/TPD-283U

## Specifications

Models	TPD-280	TPD-280U	TPD-283/TPD-283-BK	TPD-283U
<b>CPU Module</b>				
CPU	32-bit RISC CPU			
Memory Expansion	-	16 MB SDRAM / 8 MB Flash	-	16 MB SDRAM / 8 MB Flash
Real Time Clock (RTC)	-	Yes	-	Yes
Buzzer	Yes			
Rotary Switch (0~9)	Yes			
<b>Communication Interface</b>				
Ethernet	-		RJ-45 x 1, 10/100 Base-TX	
Serial Port	RS-485 (including Self-Tuner)		-	RS-485 (including Self-Tuner)
USB 1.1 Client	-	Firmware updates only	-	Firmware updates only
<b>MMI (Main Machine Interface)</b>				
LCD	2.8" TFT (Resolution 240 x 320 x 16), defective pixels <= 3			
Backlight Life	20,000 hours			
Brightness	160 cd/m2			
Touch Panel	Yes			
Reset Button	Yes			
<b>Electrical</b>				
Power Input Range	+10 ~ 30 Vdc		Power over Ethernet (PoE)	+10 ~ 30 VDC or PoE (Power over Ethernet)
Power Consumption	1.2 W (50 mA @ 24 Vdc)		IEEE 802.3af, Class 1	1.2 W (50 mA @ 24 Vdc) or IEEE 802.3af, Class 1
<b>Mechanical</b>				
Dimensions (W x L x H)	76 mm x 119 mm x 31 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			

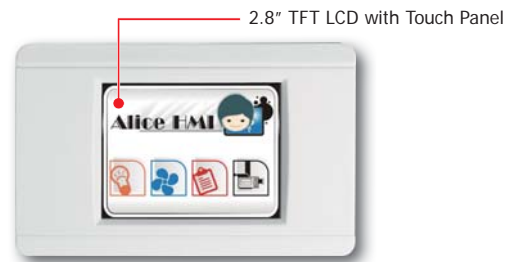
## Pin Assignments

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

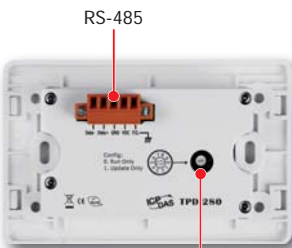


## Appearance

TPD-280/TPD-280U/TPD-283/TPD-283U Front View

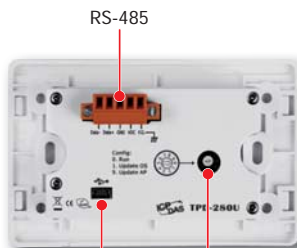


TPD-280 Rear View



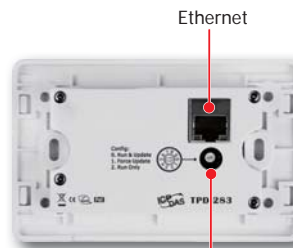
Rotary Switch

TPD-280U Rear View



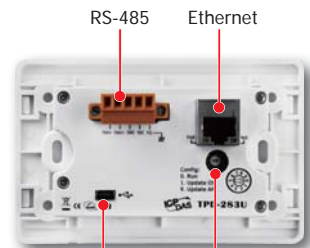
USB Rotary Switch

TPD-283/TPD-283-BK Rear View



Rotary Switch

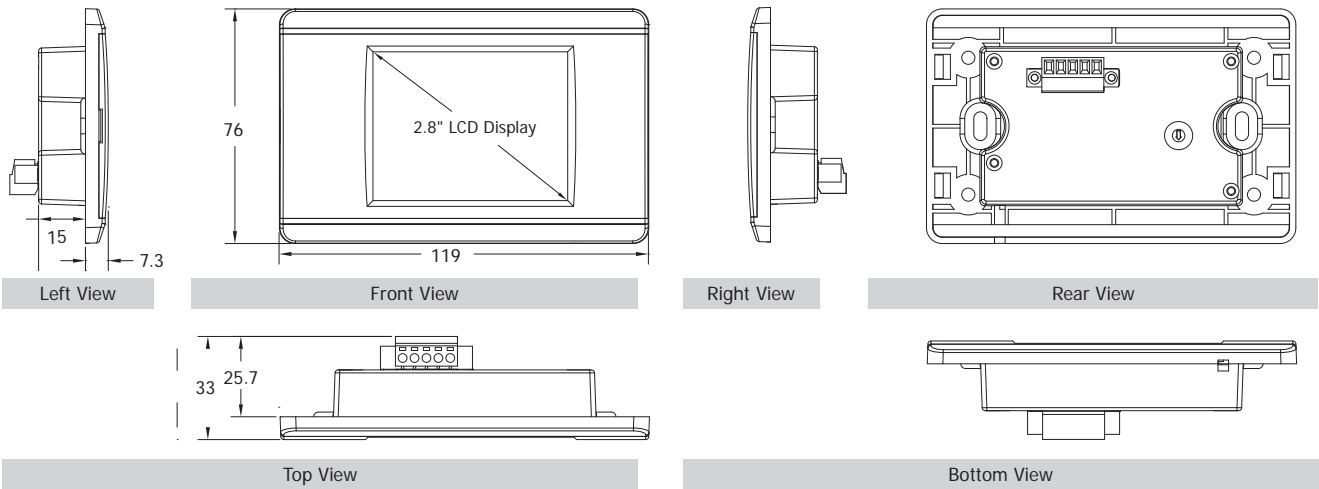
TPD-283U Rear View



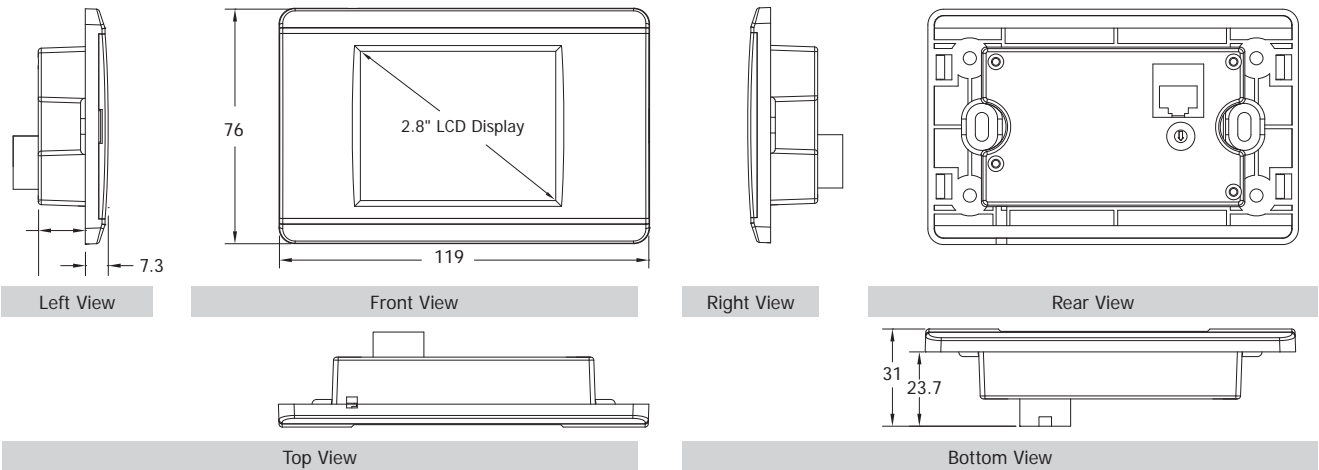
USB Rotary Switch

## Dimensions (Units: mm)

### TPD-280/TPD-280U






### TPD-283/TPD-283-BK/TPD-283U







## Ordering Information

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

## Accessories

 CA-USB10	USB to 5P Mini-USB, 28AWG, 1.5 m
 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-280/TPD-280U/TPD-283/TPD-283U Devices
 OB120	Outlet Box for TPD-280/TPD-280U/TPD-283/TPD-283-BK/TPD-283U/TPD-430/TPD-433 Devices
 EWB-T28-BK	External Wall Box for TPD-283-BK Devices