

TPD-280

TPD-280U

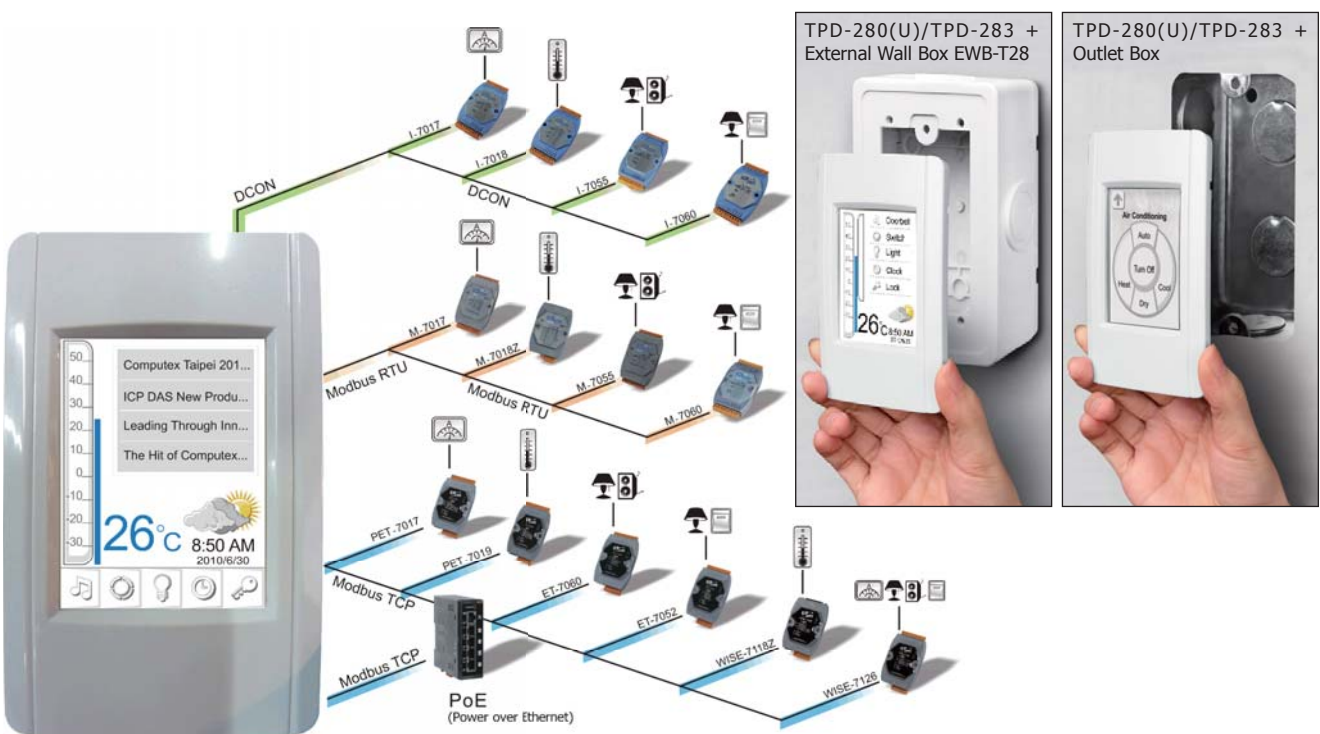
TPD-283

### Introduction

TPD-28x(U), is a series of tiny touch HMI and designed for building and home automation. TPD-28x(U) 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, of TPD-series HMI devices. With all the features provided, TPD-series touch HMI Devices might be the most cost effective HMI Device that has been found.

### Applications



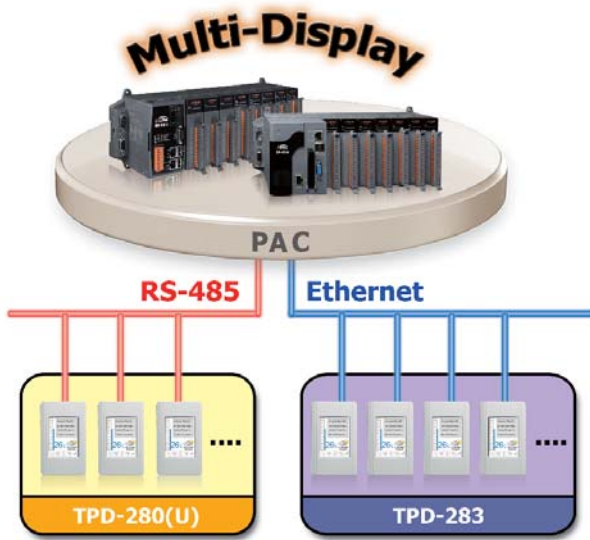
### Features

- Excellent C/P ratio (cost/performance)
- High-resolution color touch screen
- PoE (Power over Ethernet)
- RS-485 (including Self-Tuner)
- RTC (Real Time Clock)
- WYSIWYG (What You See Is What You Get) GUI design
- Free HMIWorks development tool
- Supports the popular C programming language
- Supports Ladder Designer
- Modbus TCP protocol enables remote control of I/O modules and integration with SCADA software
- ESD Protection: 4 kV
- Operating temperature: -20 ~ 70°C

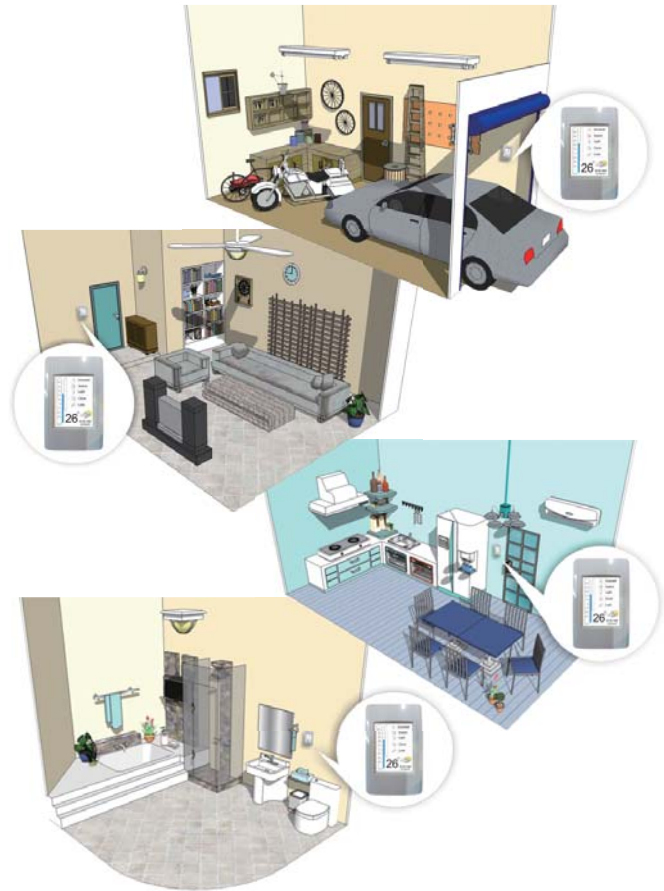


Applications

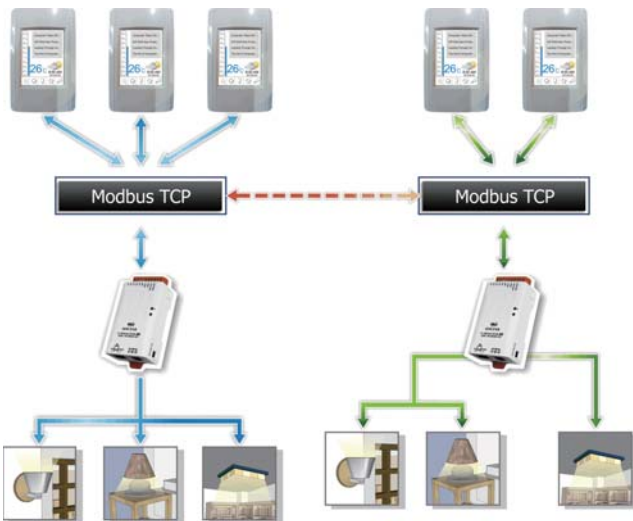
Multi-Display



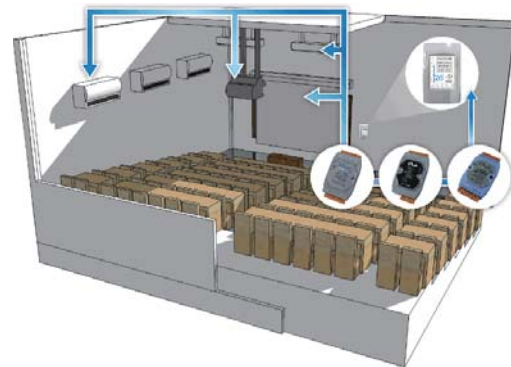
TouchPAD Anywhere



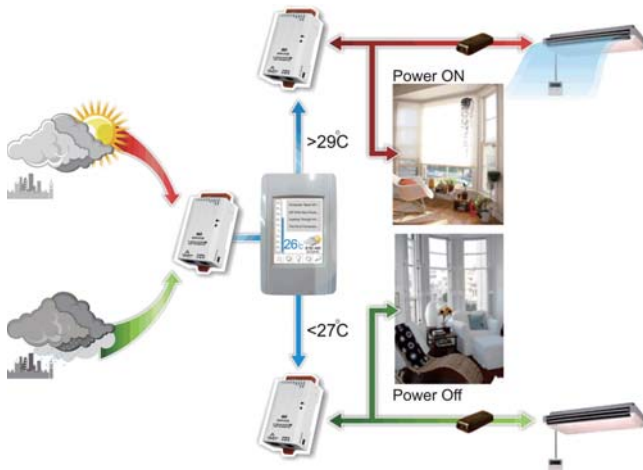
Single-way, Two-way, Multi-way Switches Example



Classroom Automation Example



Temperature Control Example



Intelligent Building Example



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Touch HMI Devices

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TPD Series

TPD-280(U)/TPD-283

## Specifications

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Touch HMI Devices

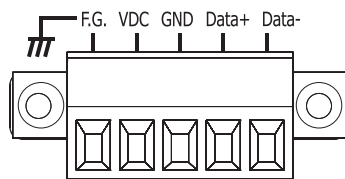
Models	TPD-280	TPD-280U	TPD-283
<b>CPU Module</b>			
CPU	Low-power 32-bit RISC CPU		
Memory Expansion	-	16 MB SDRAM / 8 MB Flash	-
Real Time Clock (RTC)	-	Yes	-
Buzzer	Yes		
Rotary Switch (0~9)	Yes		
<b>Communication Interface</b>			
Ethernet	-	-	RJ-45 x 1, 10/100 Base-TX
Serial Port	RS-485 (including Self-Tuner)		-
USB 1.1 Client (Firmware updates only)	-	Yes	-
<b>MMI (Main Machine Interface)</b>			
LCD	2.8" TFT (Resolution 240 x 320 x 16), Bright pixels <= 3		
Backlight Life	20,000 hours		
Brightness	160 cd/m <sup>2</sup>		
Touch Panel	Yes		
Reset Button	Yes		
<b>Electrical</b>			
Power Input Range	+10 ~ 30 V <sub>DC</sub>	-	Power over Ethernet (PoE)
Consumption	1.2 W (50 mA @ 24 V <sub>DC</sub> )	-	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		
<b>Environmental</b>			
Operating Temperature	-20 ~ +70 °C		
Storage Temperature	-30 ~ +80 °C		
Ambient Relative Humidity	10 ~ 90% RH, non-condensing		

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TPD Series

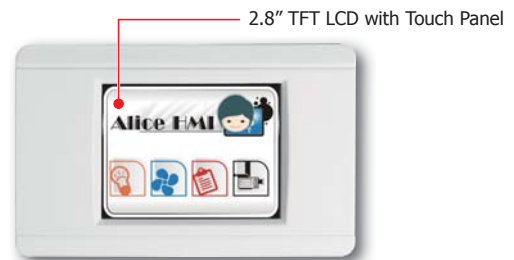
## Pin Assignments

TPD-280/TPD-280U

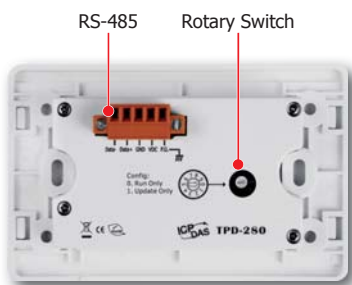


## Appearance

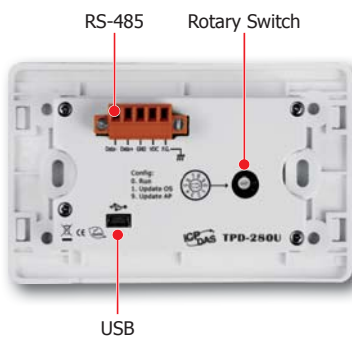
TPD-280/TPD-280U/TPD-283 Front View



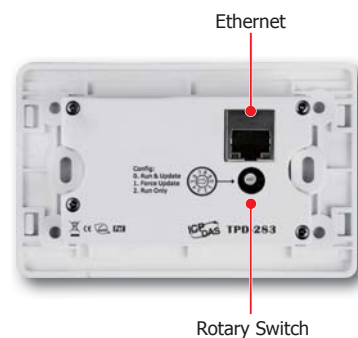
TPD-280 Rear View



TPD-280U Rear View



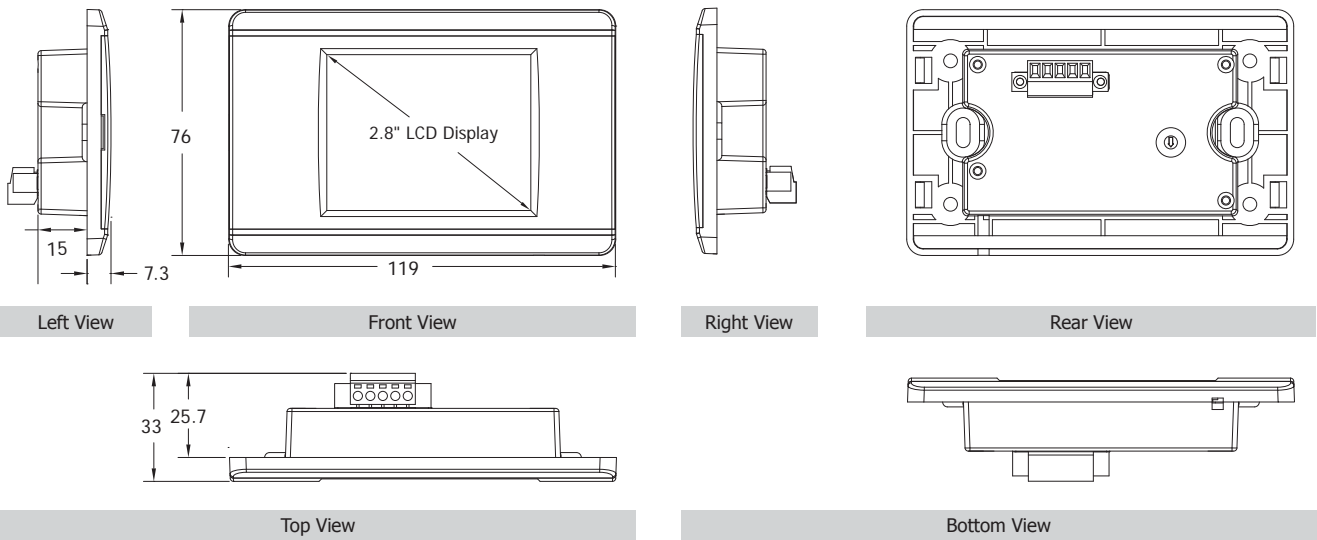
TPD-283 Rear View



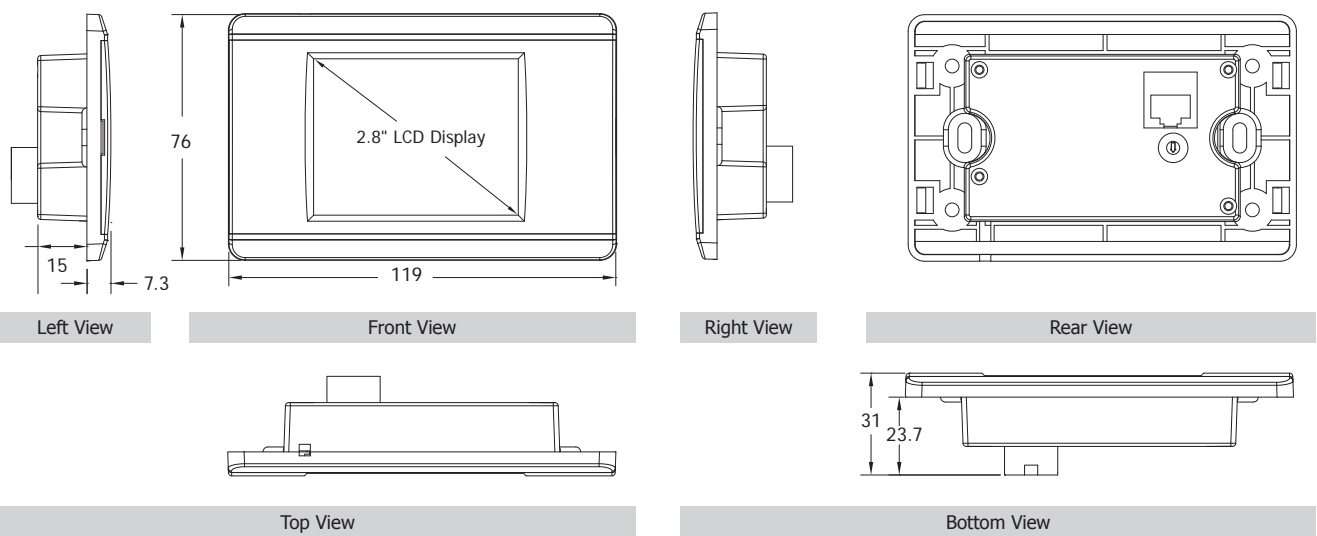
TPD-280(U)/TPD-283

▣ Dimensions (Units: mm)

TPD-280/TPD-280U







TPD-283



▣ 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 (PoE) (RoHS)

▣ Accessories

 NS-208PSE CR	Unmanaged Industrial PoE (Power over Ethernet) Ethernet Switch (RoHS)
 MDR-60-24 CR	24 V <sub>DC</sub> /2.5 A, 60 W Power Supply with DIN-Rail Mounting (RoHS)
 DIN-KA52F CR	24 V <sub>DC</sub> /1.04 A, 25 W Power Supply with DIN-Rail Mounting (RoHS)
 EWB-T28	External Wall Box for TPD-280/TPD-280U/TPD-283 Devices