

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.

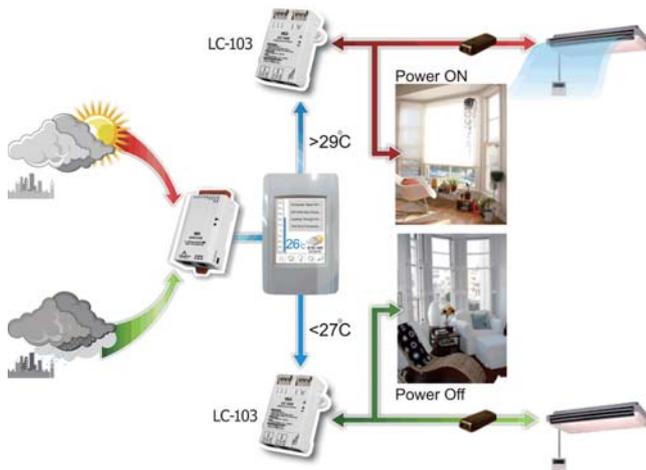
Applications

TPD 2.8 inch series with External Wall Box EWB-T28

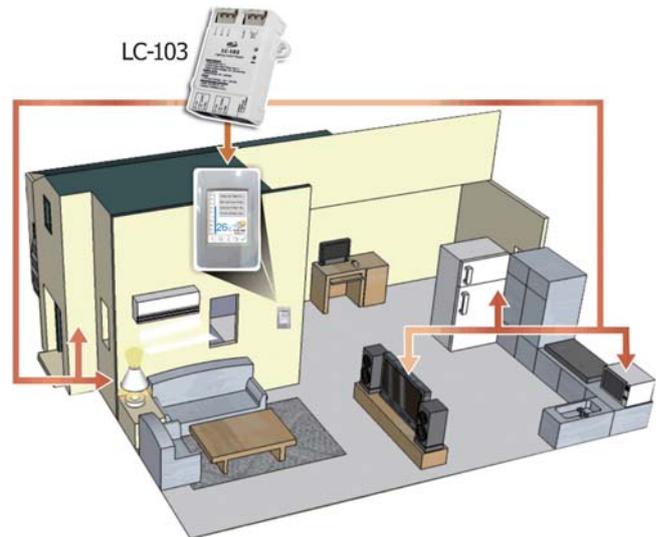
TPD 2.8 inch series with Outlet Box OB120

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

Temperature Control Example



Intelligent Building Example

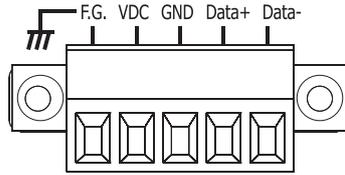


Specifications

Models	TPD-280-H	TPD-283-H	TPD-283U-H
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			
Serial Port	COM1	RS-485 (including Self-Tuner)	RS-485 (including Self-Tuner)
	COM2		
Ethernet	-		RJ-45 x 1, 10/100 Base-TX
MMI (Main Machine Interface)			
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		
Electrical			
Powered from Terminal Block	+12 ~ 48 VDC	-	+12 ~ 48 VDC
Powered from PoE	-	IEEE 802.3af, Class1 (48 V)	
Power Consumption	1.5 W		
Mechanical			
Dimensions (W x L x H)	127 mm x 92 mm x 21.8 mm	127 mm x 92 mm x 31 mm	
Installation	Wall Mount		
Ingress Protection	Front Panel: IP40		
Environmental			
Operating Temperature	-20 ~ +70°C		
Storage Temperature	-30 ~ +80°C		
Ambient Relative Humidity	10 ~ 90% RH, non-condensing		

Pin Assignments

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

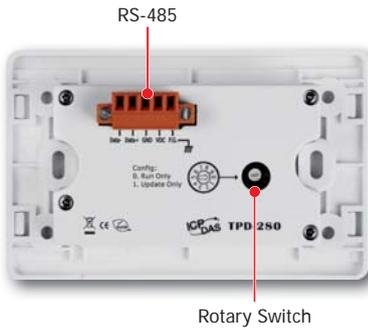


Appearance

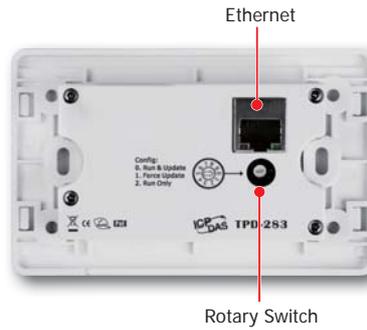
TPD-280-H/TPD-283-H/TPD-283U-H Front View



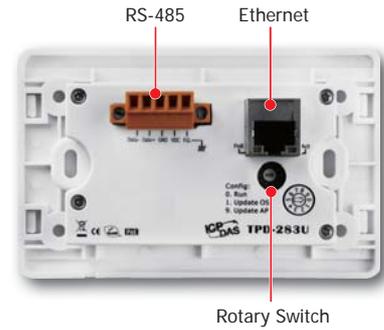
TPD-280-H Rear View



TPD-283-H Rear View

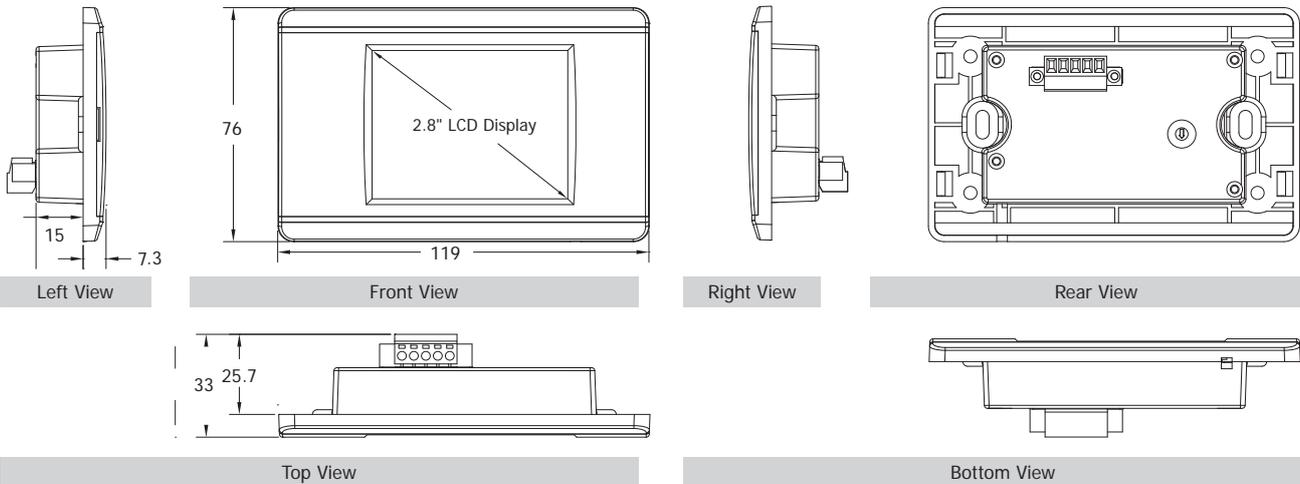


TPD-283U-H Rear View

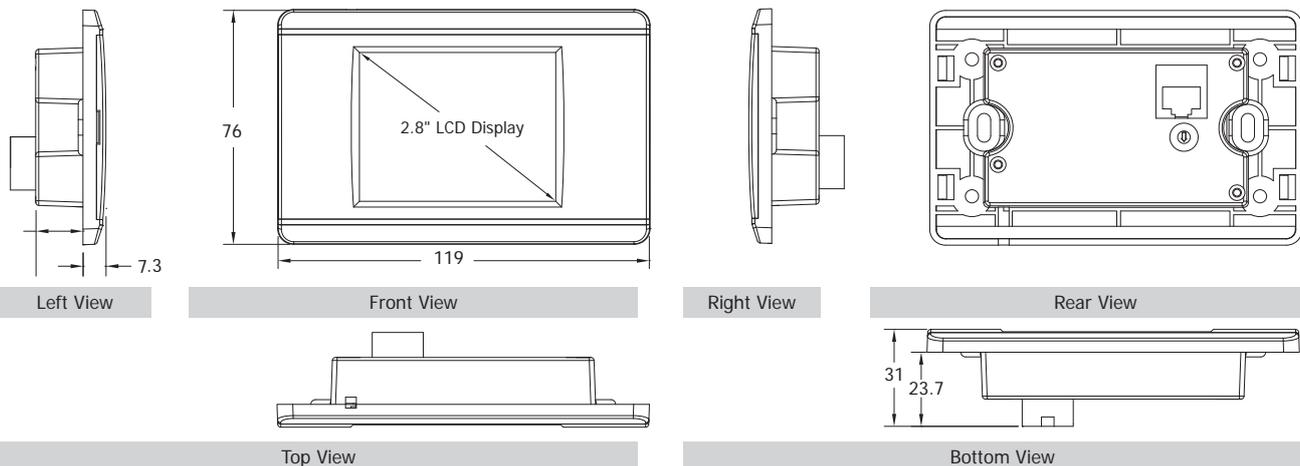


Dimensions (Units: mm)

TPD-280-H



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



Ordering Information

TPD-280-H CR	2.8" Touch HMI device with RS-485 (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
 OB120	Outlet Box for TPD 2.8 inch series and TPD-430/ TPD-433 Devices