



TPD-280-H

2.8" Touch HMI Device with 1 x RS-485



TPD-280U-H



TPD-283-H

2.8" Touch HMI Device with Ethernet (PoE)



TPD-283U-H

2.8" Touch HMI Device with 1 x RS-485, Ethernet (PoE)

Features

- High-color high-resolution touch screen
- PoE (Power over Ethernet)
- RS-485 (including Self-Tuner)
- RTC (Real Time Clock)
- Free HMIWorks development tool
- Support C language and Ladder Designer
- Support user-defined third party protocol (C language)
- Modbus TCP/RTU protocol
- Operating Temperature: -20 ~ 70 °C



Introduction

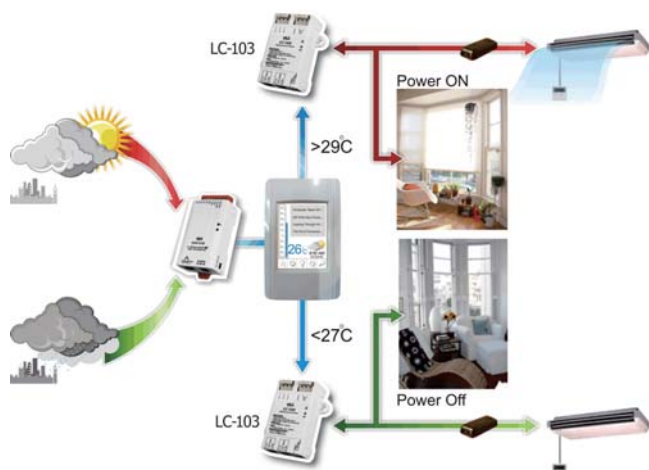
The **TouchPAD TPD 2.8" Series**, TPD-280-H/TPD-280U-H/TPD-283-H/TPD-283U-H, is a series of touch HMI and designed for building and home automation. The TPD 2.8" Series is equipped with high-color high-resolution TFT touch screen and fits in with regular electrical wall-mount outlet. Besides, it is seamlessly 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 TouchPAD series devices when using Ladder Designer. Moreover, by utilizing the Ethernet functionality of the TouchPAD, users can easily implement a redundant control solutions. With all the features provided, TouchPAD series touch HMI Devices must be the most cost effective HMI Device ever been in the market.

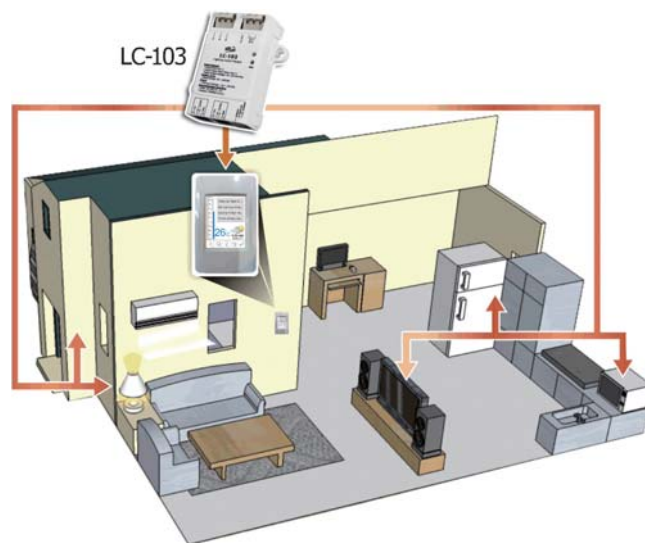
Applications

The diagram illustrates the connectivity of the TPD 2.8" series devices. A central hub is connected to multiple devices via various protocols: DCON (L-7017, L-7018, L-7055, L-7060), Modbus RTU (M-7017, M-7018Z, M-7055, M-7060), Modbus TCP (PET-7017, PET-7019, ET-7080, ET-7082, WISE-7118Z, WISE-7128), and PoE (Power over Ethernet). Two inset images show the device being installed into an external wall box (EWB-T28) and an outlet box (OB120). A warning icon indicates that the space between the Ethernet plug and the bottom of the external wall box is too small.

Temperature Control Example



Intelligent Building Example

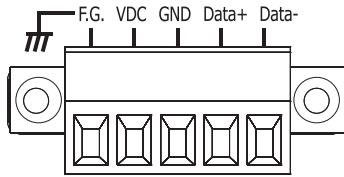


Specifications

Model	TPD-280-H	TPD-280U-H	TPD-283-H	TPD-283U-H
Main Unit				
CPU	32-bit RISC CPU			
Storage	-	16 MB SDRAM/ 16 MB Flash	-	16 MB SDRAM/ 16 MB Flash
Real Time Clock	-	Yes	-	Yes
Display				
Type	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			
HMI				
Buzzer	Yes			
Rotary Switch	Yes			
Ethernet				
Ports	-		RJ-45 x 1, 10/100 Base-TX	
Power				
Consumption	1.5 W			
Powered from PoE	-	-	IEEE 802.3af, Class1 (48 V)	
Powered from Terminal Block	+12 ~ 48 VDC	+12 ~ 48 VDC	-	+12 ~ 48 VDC
Mechanical				
Dimensions (mm)	119 mm x 76 mm x 33 mm			
Installation	Wall Mounting			
Ingress Protection Rating	Front Panel: IP40			
Environmental				
Operating Temperature	-20 ~ +70°C			
Storage Temperature	-30 ~ +80 °C			
Humidity	10 ~ 90% RH, Non-condensing			

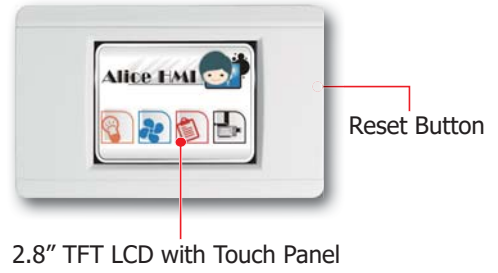
Pin Assignments

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



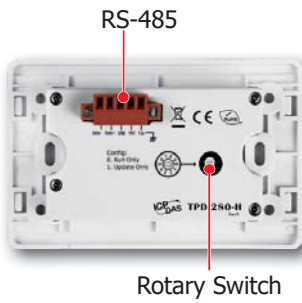
Appearance

Front View



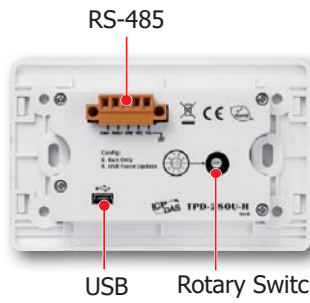
2.8" TFT LCD with Touch Panel

TPD-280-H Rear View



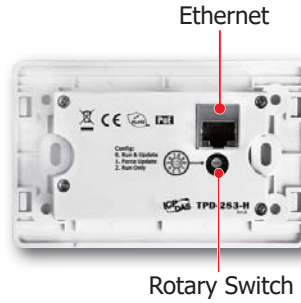
Rotary Switch

TPD-280U-H Rear View



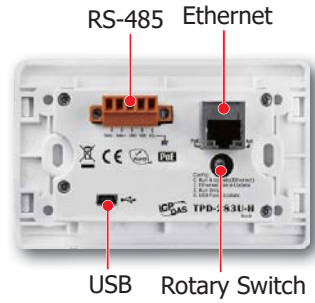
USB Rotary Switch

TPD-283-H Rear View



Rotary Switch

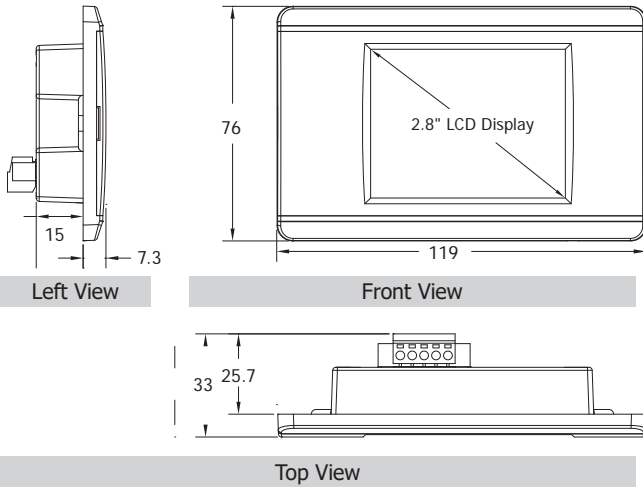
TPD-283U-H Rear View



USB Rotary Switch

Dimensions (Units: mm)

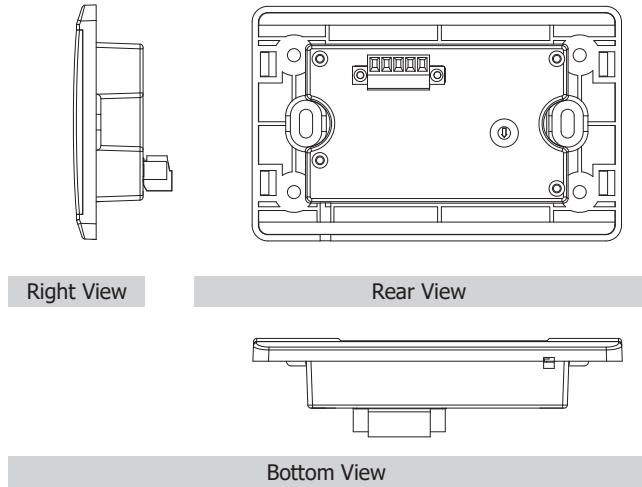
TPD-280-H/TPD-280U-H



Left View

Front View

Top View

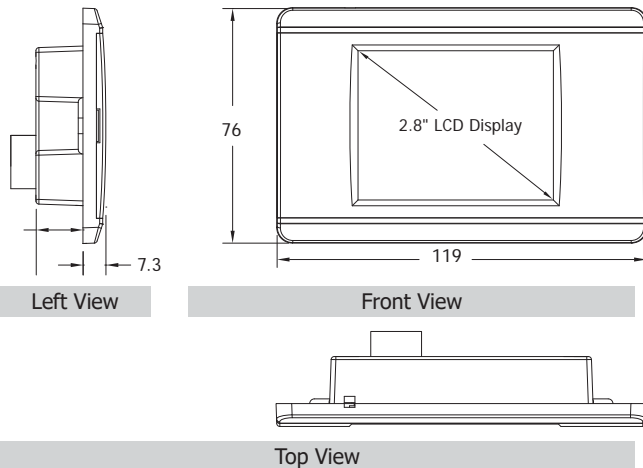


Right View

Rear View

Bottom View

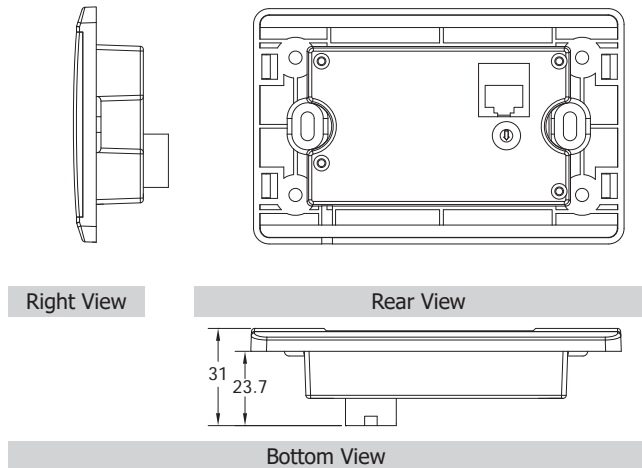
TPD-283-H/TPD-283U-H



Left View

Front View

Top View



Right View







Rear View

Bottom View

Ordering Information

TPD-280-H CR	2.8" Touch HMI Device with 1 x RS-485 (RoHS)
TPD-280U-H CR	2.8" Touch HMI Device with 1 x RS-485, RTC and USB Download Port (RoHS)
TPD-283-H CR	2.8" Touch HMI Device with Ethernet (PoE) (RoHS)
TPD-283U-H CR	2.8" Touch HMI Device with 1 x RS-485, RTC, Ethernet (PoE) and USB Download Port (RoHS)

Accessories

 CA-USB10	USB to 5P Mini-USB, 28AWG, 1.5 m
 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)
 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