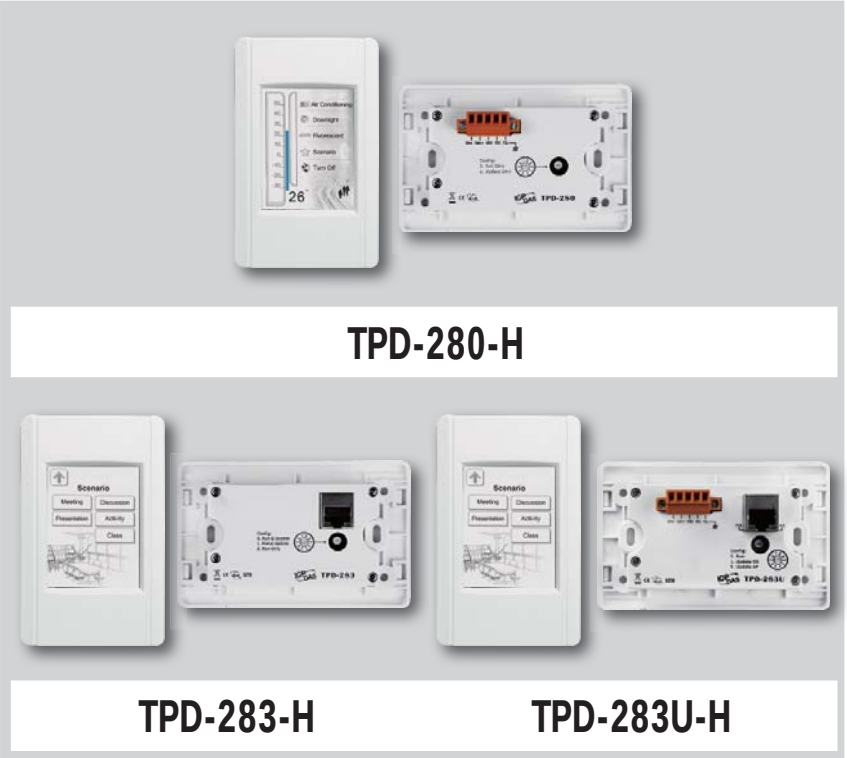


TPD-280-H

TPD-283-H TPD-283U-H

Features

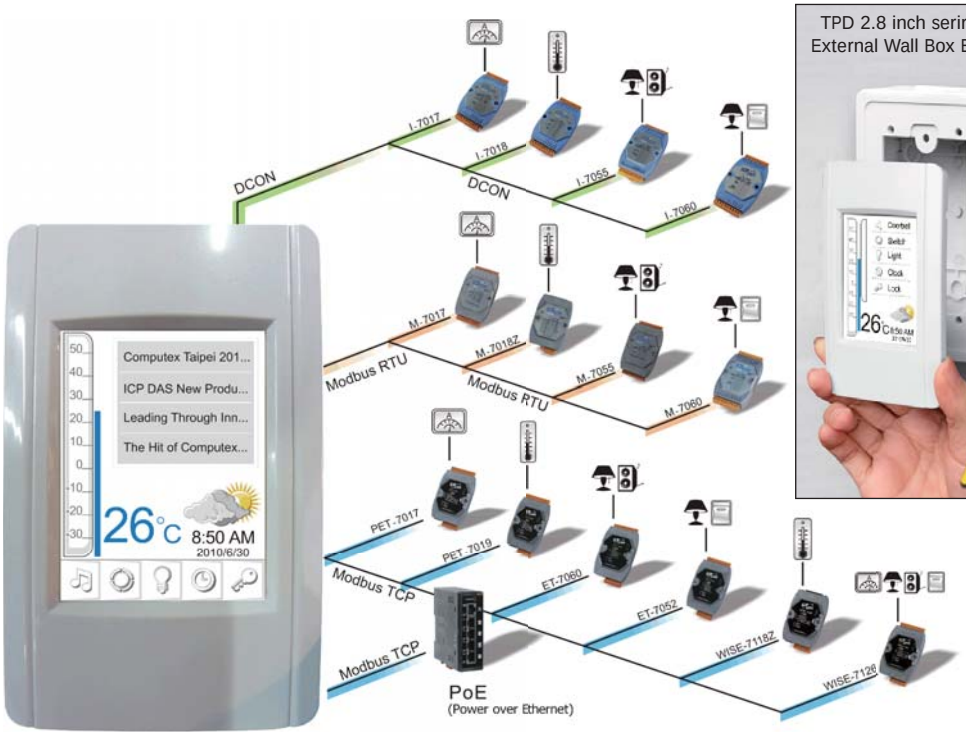
- Excellent C/P ratio (cost/performance)
- High-resolution color touch screen
- PoE (Power over Ethernet)
- RS-485 (including Self-Tuner)
- RTC (Real Time Clock)
- GUI design
- Free HMIWorks development tool
- Suppots C programming language and Ladder Designer
- Supports the custom communication protocol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

Introduction

TPD 2.8 inch serires is a series of tiny touch HMI and designed for building and home automation. TPD 2.8 inch serires 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

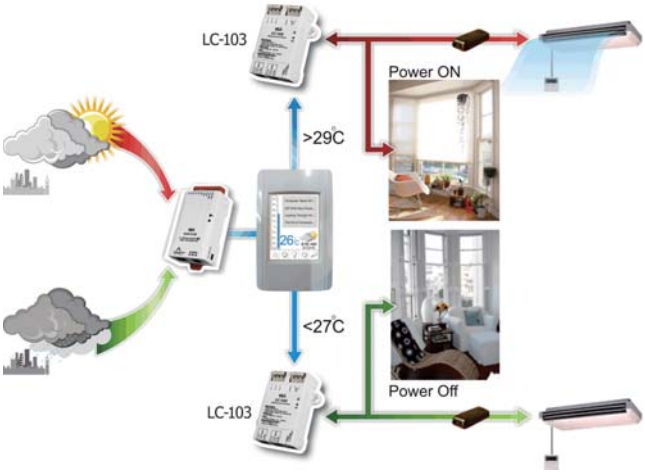


TPD 2.8 inch serires with External Wall Box EWB-T28

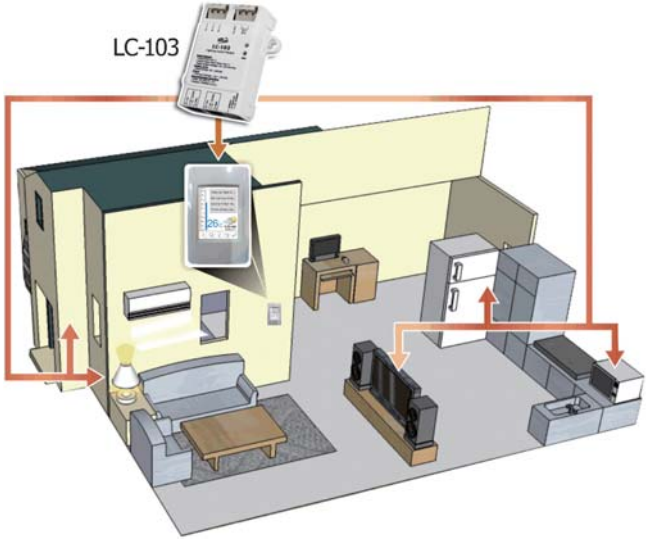
TPD 2.8 inch serires with Outlet Box OB120

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

Temperature Control Example



Intelligent Building Example

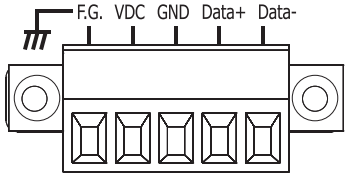


Specifications

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	
Firmware Update				
Ethernet		-	Yes	Yes
USB Client 1.1		-	-	Yes
RS-485		Yes	-	-
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

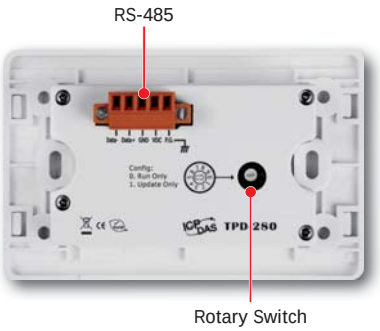
TPD-280-H/TPD-283U-H



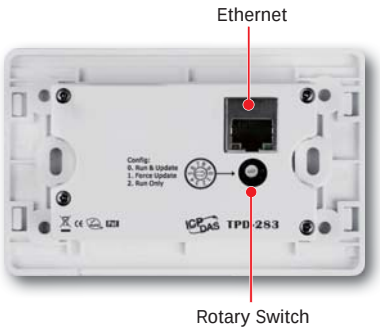
Appearance

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

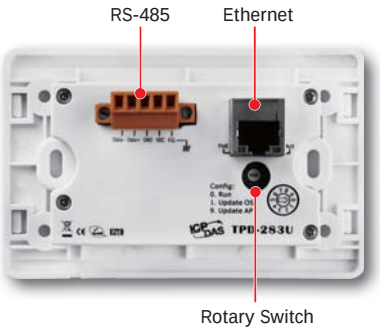
TPD-280-H Rear View



TPD-283-H Rear View

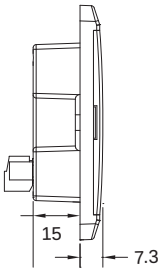


TPD-283U-H Rear View

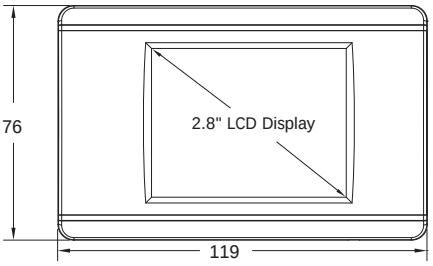


Dimensions (Units: mm)

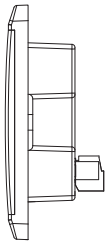
TPD-280-H



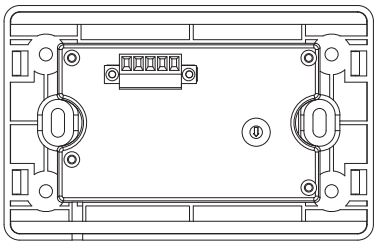
Left View



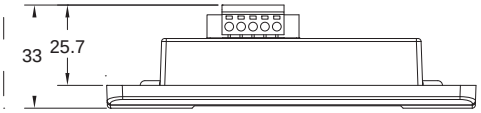
Front View



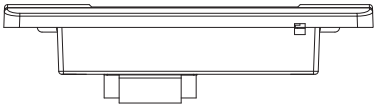
Right View



Rear View

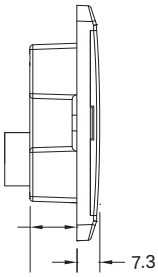


Top View

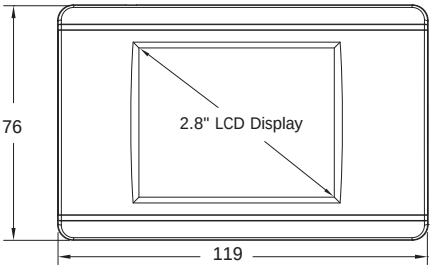


Bottom View

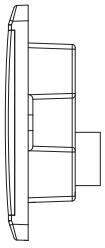
TPD-283-H/TPD-283U-H



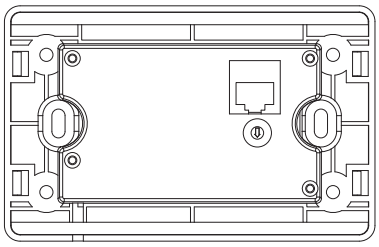
Left View



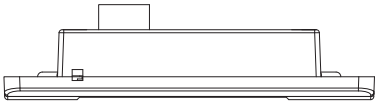
Front View



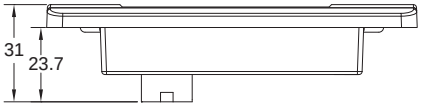
Right View



Rear View



Top View



Bottom View

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 V_{DC}/2.5 A, 60 W Power Supply with DIN-Rail Mounting (RoHS)
DIN-KA52F CR	24 V_{DC}/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