



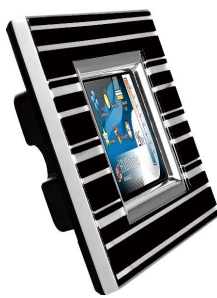
**TPD-280-M1/  
TPD-283-M1/  
TPD-283U-M1**

2.8" Touch HMI Device  
with 1 x RS-485



**TPD-280-M2/  
TPD-283-M2/  
TPD-283U-M2**

2.8" Touch HMI Device  
with Ethernet (PoE)



**TPD-280-M3/  
TPD-283-M3/  
TPD-283U-M3**

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

## Features

- High-resolution color touch screen
- PoE (Power over Ethernet)
- RTC (Real Time Clock)
- Free HMIWorks development tool
- Supports C programming language and Ladder Designer
- Supports the custom communication protocol (C language)
- Modbus TCP/RTU protocol
- Operating temperature: -20 ~ 70 °C



## Introduction

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

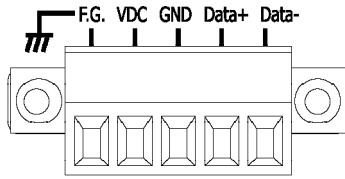
For PLC users, HMIWorks provides Ladder Designer, and for IT users, C language environment is provided. Especially, it only takes no more than 30 minutes to learn how to create an application program of TPD-series devices when using Ladder Designer. Moreover, we provide redundant solutions in our PoE version, TPD-283/283U-Mx 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.

## Specifications

Models	TPD-280-Mx	TPD-283-Mx	TPD-283U-Mx
<b>Main Unit</b>			
CPU	32-bit RISC CPU		
<b>Display</b>			
Type	LCD 2.8" TFT (Resolution 240 x 320 x 16), defective pixels <= 3		
Backlight Life	20,000 hours		
Brightness	160 cd/m <sup>2</sup>		
Touch Panel	Resistive Touch		
<b>COM Ports</b>			
Ports	1 x RS-485 (including Self-Tuner)		
<b>HMI</b>			
Buzzer	Yes		
Rotary Switch	Yes		
Reset Button	Yes		
<b>Ethernet</b>			
Ports	-	RJ-45 x 1, 10/100 Base-TX	
<b>Power</b>			
Consumption	1.5 W		
Powered from PoE	-	IEEE 802.3af, Class1 (48 V)	
Powered from Terminal Block	+12 ~ 48 VDC	-	+12 ~ 48 VDC
<b>Mechanical</b>			
Dimensions (mm)	127 mm x 92 mm x 31 mm	127 mm x 92 mm x 30 mm	127 mm x 92 mm x 31 mm
Installation	Wall Mounting		
Ingress Protection Rating	Front Panel: IP40		
<b>Environmental</b>			
Operating Temperature	-20 ~ +70°C		
Storage Temperature	-30 ~ +80 °C		
Humidity	10 ~ 90% RH, Non-condensing		

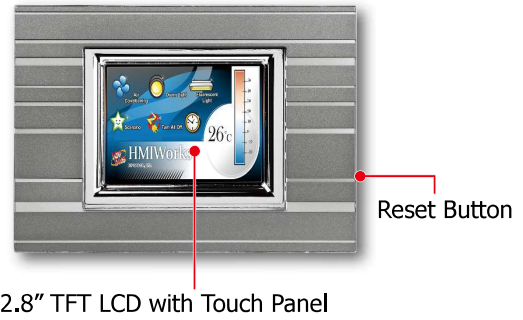
## Pin Assignments

TPD-280/283U-Mx Series



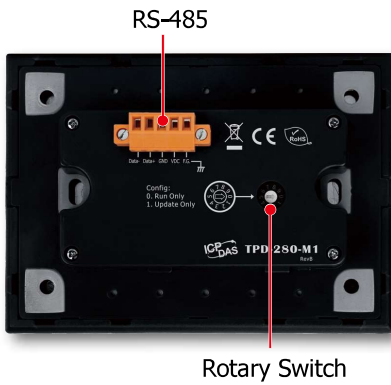
## Appearance

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



2.8" TFT LCD with Touch Panel

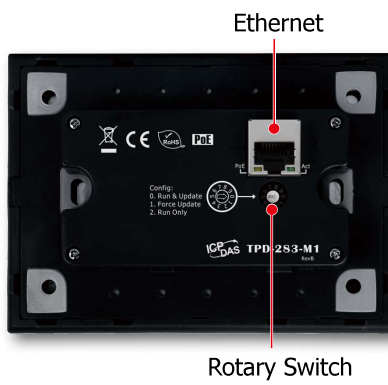
TPD-280-Mx Rear View



RS-485

Rotary Switch

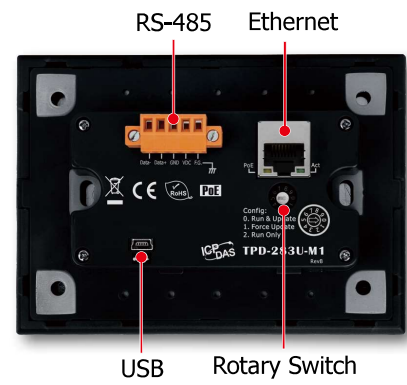
TPD-283-Mx Rear View



Ethernet

Rotary Switch

TPD-283U-Mx Rear View



RS-485

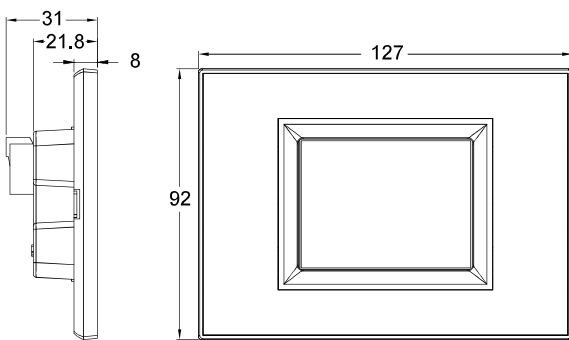
Ethernet

USB

Rotary Switch

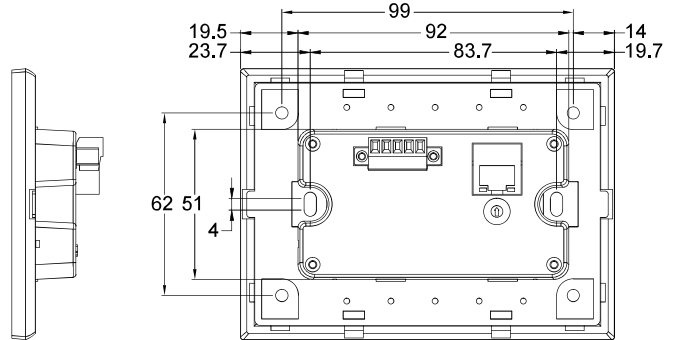
## Dimensions (Units: mm)

TPD-280/283/283U-Mx Series



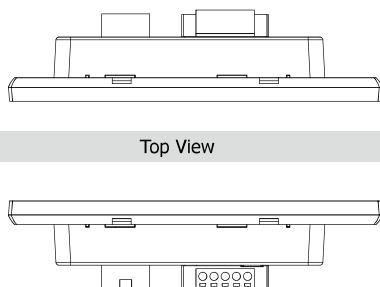
Left View

Front View



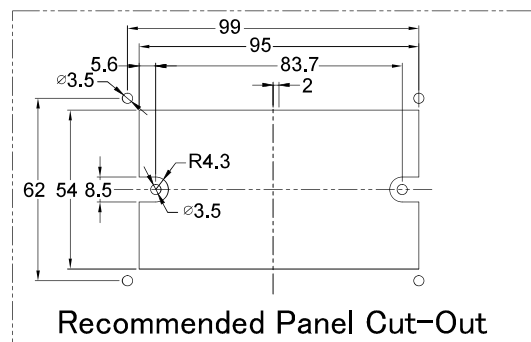
Right View

Rear View



Top View

Bottom View






Recommended Panel Cut-Out

Wall Mounting

## Ordering Information

<b>TPD-280-M1 CR</b>	2.8" Touch HMI Device with 1 x RS-485 (White Cover) (RoHS)
<b>TPD-280-M2 CR</b>	2.8" Touch HMI Device with 1 x RS-485 (Gray Cover) (RoHS)
<b>TPD-280-M3 CR</b>	2.8" Touch HMI Device with 1 x RS-485 (Black Cover) (RoHS)
<b>TPD-283-M1 CR</b>	2.8" Touch HMI Device with Ethernet (PoE) (White Cover) (RoHS)
<b>TPD-283-M2 CR</b>	2.8" Touch HMI Device with Ethernet (PoE) (Gray Cover) (RoHS)
<b>TPD-283-M3 CR</b>	2.8" Touch HMI Device with Ethernet (PoE) (Black Cover) (RoHS)
<b>TPD-283U-M1 CR</b>	2.8" Touch HMI Device with 1 x RS-485, RTC, Ethernet (PoE) and USB Download Port (White Cover) (RoHS)
<b>TPD-283U-M2 CR</b>	2.8" Touch HMI Device with 1 x RS-485, RTC, Ethernet (PoE) and USB Download Port (Gray Cover) (RoHS)
<b>TPD-283U-M3 CR</b>	2.8" Touch HMI Device with 1 x RS-485, RTC, Ethernet (PoE) and USB Download Port (Black Cover) (RoHS)

## Accessories

 OB120	Outlet Box for TPD 2.8 inch Series and TPD-430-H/ TPD-433-H Devices
 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)