

## Introduction \_

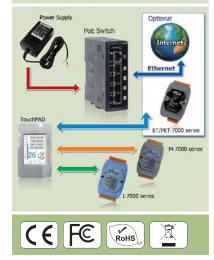
TPD 2.8 inch serires is a series of tiny touch HMI and designed for building and home automation. TPD 2.8 inch serires is equipped with high resolution TFT color touch screen and fits in with regular electrical wallmount outlet. Besides, it is seamlessly integrated with rich I/O modules and presents 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, HMI Works 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.

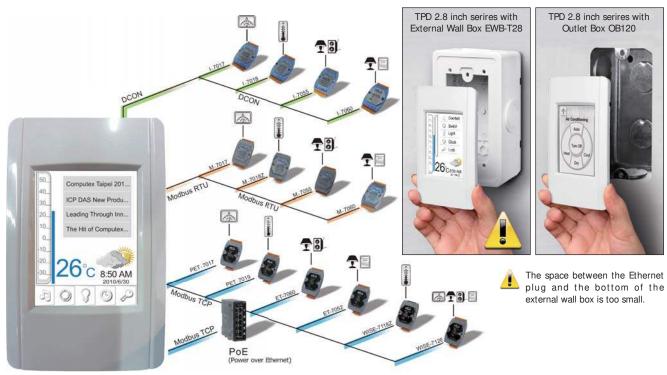
#### 🖪 Features

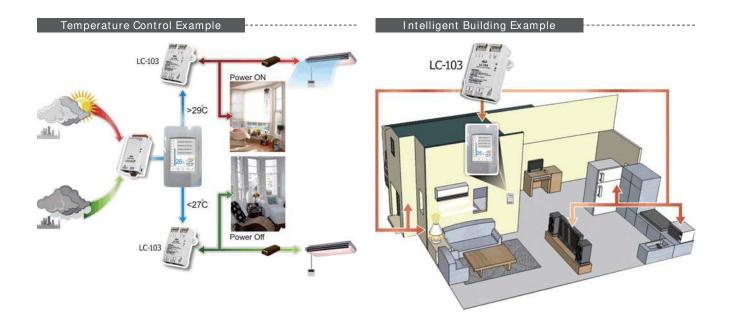
- Excellent C/P ratio (cost/performance)
- High-resolution color touch screen
- PoE (Power over Ethernet)
- RS-485 (including Self-Tuner)
- RTC (Real Time Clock)
- GUI design
- Free HMI Works development tool
- Suppots C programming language and Ladder Designer
- Supports the custom communication protocol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

Operating temperature: -20 ~ 70°C



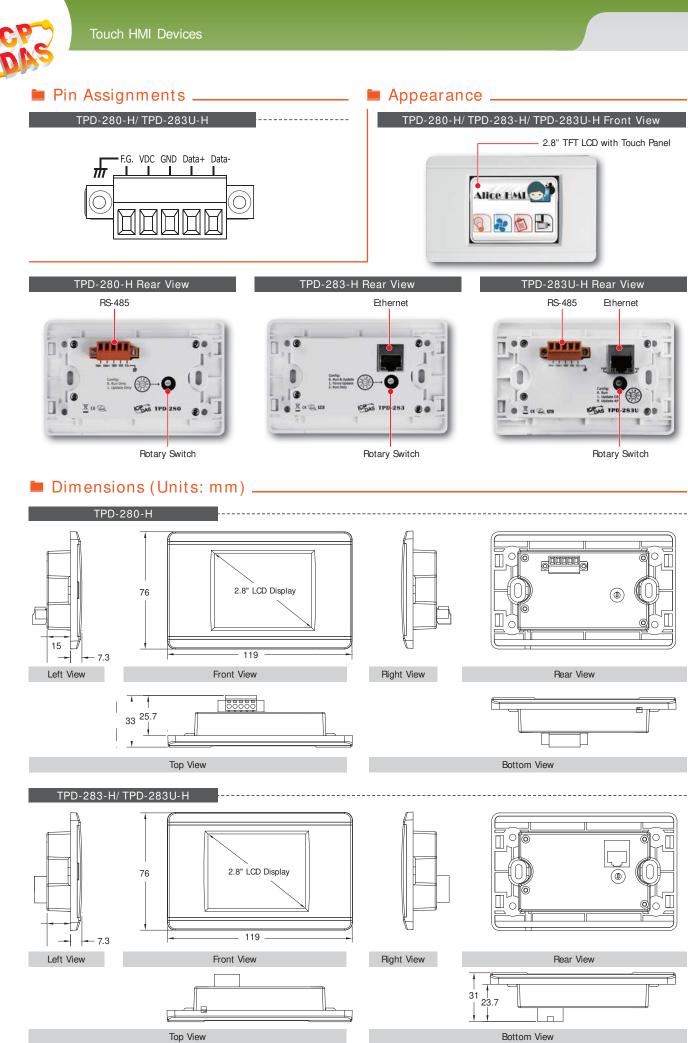
## Applications \_





## 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   |                        |                               |  |
| Communicatio                | on Interface     |   |                        |                               |  |
| Serial Port                 | COM1             | RS-485 (including Self-Tuner)   | -                      | RS-485 (including Self-Tuner) |  |
| Serial Port                 | COM2             | -   |                        |                               |  |
| Ethernet                    |                  | - RJ-45 x 1, 10/100 Base-TX   |                        |                               |  |
| MMI (Main Ma                | achine 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   |                        |                               |  |
| Environmenta                | I                |   |                        |                               |  |
| Operating Temperature       |                  | -20 ~ +70°C   |                        |                               |  |
| Storage Temperature         |                  | -30 ~ +80°C   |                        |                               |  |
| Ambient Relative Humidity   |                  | 10 ~ 90% RH, non-condensing   |                        |                               |  |



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# 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 \_\_\_\_\_

| 10016        | 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       |