

## NXP i.MX8M 10.1" Frameless POE Touch Panel PC / HMI with 3mm Tempered Glass Touch Screen, WiFi and RS-232/485 Ports



### INTRODUCTION

The PPC-4310 is an all-in-one industrial Panel PC with WUXGA 1920 x 1200 touch screen. The system equips with NXP's i.MX8M Quad Core ARM processor with a guaranteed 10 year lifespan. Edge to edge glass front panel meets IP65 rating. The Gigabit Ethernet POE (Power over Ethernet) option makes it perfect for industrial control, building automation, HMI, vending machine and interactive IoT applications.

### FEATURES

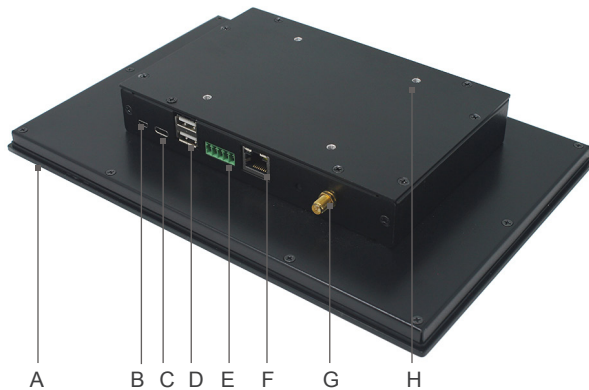
- NXP i.MX8M application processor with long life cycle support
- 802.3af POE Gigabit Ethernet port, second PCIe GbE option
- 10.1" IPS LCD panel with projected capacitive touch screen
- On-board WiFi/BT, RS-232/485 and GPIO ports
- Support Android 8.1, 9.0, Yocto Embedded Linux, Ubuntu

### SPECIFICATIONS

|                    |   |
|--------------------|---|
| Processor          | NXP i.MX 8MQuad, 4x ARM Cortex-A53 @ 1.5GHz   |
| Platform           | ARM Cortex-A53  |
| System Memory      | Onboard LPDDR4, up to 4GB   |
| Ethernet           | 1 x 10/100/1000 Mbps GbE with POE option, second PCIe GbE (via optional add-on card)  |
| WiFi               | 1x WiFi/Bluetooth USB module, 802.11 b/g/n + Bluetooth v4.0   |
| Storage            | Onboard iNAND flash (8GB default), 1x micro SD slot, 265K EEPROM with write protect control   |
| Cooling            | Fanless   |
| Display Interface  | MIPI  |
| I/O Ports          | 1 x RS-232/RS-485 and 2 x GPIO via terminal block<br>1 x RS-232, GPIOs, SPI, 8ch DMIC, I2C via internal header<br>2 x USB 2.0 Type A<br>2 x USB 2.0 pin header<br>1x USB Type C 3.0 OTG |
| Speaker            | Optional 1 x mono Class D speaker, up 2W(4Ω) or stereo line-out   |
| Watchdog timer     | Built-in  |
| RTC                | Support RTC backup battery  |
| Input Voltage      | 5V DC or POE, 9V - 36V DC (via optional module)   |
| Display Type       | 10.1" TFT active matrix LED backlight   |
| Display Resolution | 1920 x 1200   |

|                       |   |
|-----------------------|---|
| Luminance             | 400 cd/m <sup>2</sup>                                     |
| Contrast Ratio        | 1300  |
| Viewing Angle         | 85 (Left), 85 (Right), 85 (Top), 85 (Bottom)              |
| Backlight Lifetime    | 25,000Hr (Typical)  |
| Touch Type            | Projected capacitive touch screen                         |
| Touch Controller      | I <sup>2</sup> C  |
| Enclosure Material    | Aluminum + Steel  |
| Enclosure Color       | Black, White front panel option                           |
| Mounting Option       | Panel mount or 75 x 75mm VESA mount                       |
| Operating Temperature | 0 ~ 60°C (32 ~ 140°F)                                     |
| Storage Temperature   | -40 ~ 85° C (-40 ~ 185° F)                                |
| Operating Humidity    | 10 ~ 95% @ 40°C (Non-Condensing)                          |
| Protection            | Front panel IP65 compliant, 3mm Tempered Glass            |
| Dimensions            | 256 x 173 x 39.5 mm (10.7" x 6.81" x 1.56")               |
| OS Support            | Android 8.1, 9.0, Yocto Embedded Linux 4.x kernel, Ubuntu |

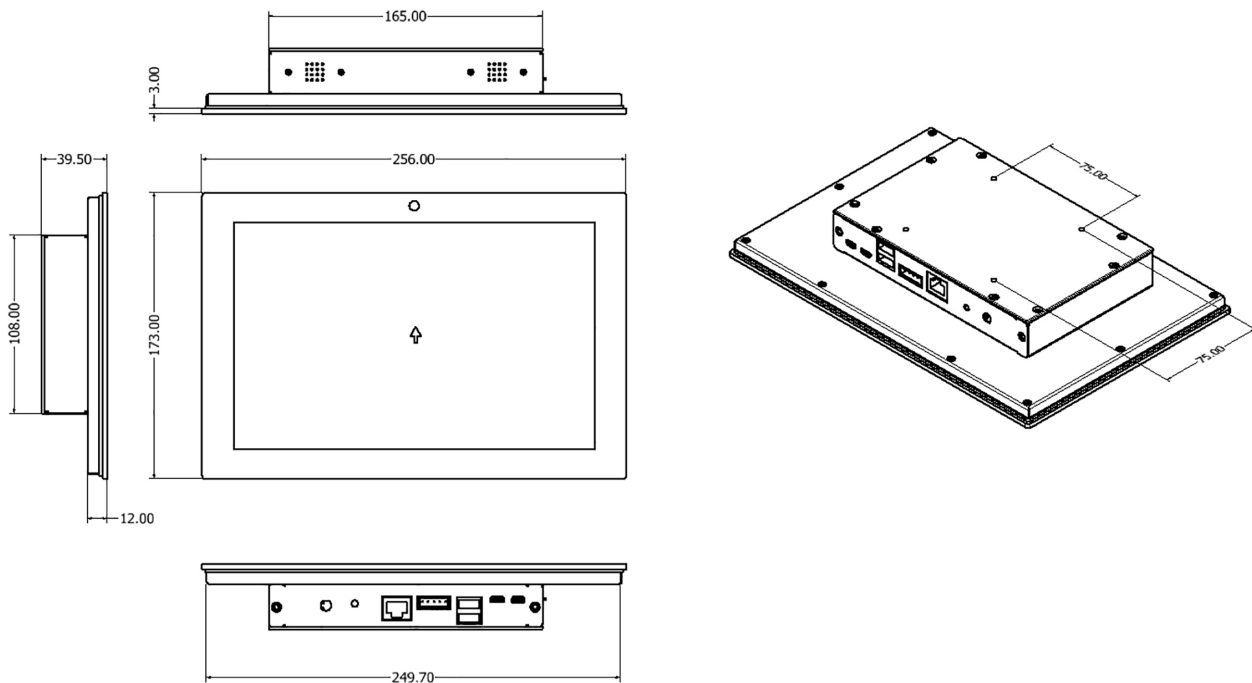
## I/O LAYOUT



- A. 3mm Tempered Glass
- B. Mini-HDMI
- C. USB 3.0 OTG
- D. 2x USB 2.0
- E. 2 x GPIO, 1x RS-232/485
- F. Ethernet 1 with POE ready
- G. External WiFi Antenna
- H. 75 x 75mm VESA Mount

## DIMENSIONS

Unit: mm



## ORDER INFORMATION

| Part No.     | Description  |
|--------------|--|
| PPC-4310-MQS | 10.1" Panel PC / HMI with i.MX6 DL processor, capacitive touch screen, single GbE, 5V DC power input |
| PPC-4310-MQP | 10.1" Panel PC / HMI with i.MX6 DL processor, capacitive touch screen, single GbE, POE power input   |
| PPC-4310-DQT | 10.1" Panel PC / HMI with i.MX6 DL processor, capacitive touch screen, dual GbE, 5V DC power input   |
| PPC-4310-DQP | 10.1" Panel PC / HMI with i.MX6 Q processor, resistive touch screen, dual GbE, POE power input       |