

NXP i.MX8M Plus 10.1" Frameless AI/ML Ready Touch Panel PC / HMI with 3mm Tempered Glass Touch Screen, WiFi and RS-232/485/CAN Ports



INTRODUCTION

The PPC-4910 is an all-in-one industrial Panel PC with 1280 x 800 touch screen. The system equips with NXP's i.MX8M Plus Quad Core ARM processor with a guaranteed 10 year lifespan. Edge to edge glass front panel meets IP65 rating. The integrated AI/ML Neural Processing Unit makes it perfect for smart industrial control, building automation, HMI, vending machine and interactive IoT applications.

FEATURES

- NXP i.MX8M Plus with up to four 1.8 GHz Cortex-A53 processors
- POE ready Gigabit Ethernet port, second GbE option
- 10.1" up to 1000 nits LCD panel with projected capacitive touch screen
- On-board WiFi/BT, RS-232/485/CAN and GPIO ports
- Support Android 10, Yocto Embedded Linux, Debian
- Integrated AI/ML Neural Processing Unit

SPECIFICATIONS

Processor	NXP i.MX 8M Plus, 4x ARM Cortex-A53 @ 1.8GHz, 1x Arm Cortex-M7 @ 800MHz	Luminance	350 or 1000 cd/m ²
Platform	ARM Cortex-A53	Contrast Ratio	800
System Memory	Onboard LPDDR4, up to 4GB	Viewing Angle	85 (Left), 85 (Right), 85 (Top), 85 (Bottom)
Ethernet	1 x GbE with POE option, second RGMII or PCIe GbE option	Backlight Lifetime	30,000Hr (Typical)
WiFi	1x WiFi/Bluetooth (AP6255/56) module, 802.11 b/g/n/ac + BT v5.0	Touch Type	Projected capacitive touch screen
Storage	Onboard iNAND flash (16GB default), 1x micro SD slot, 265K EEPROM with write protect control	Touch Controller	I ² C
Cooling	Fanless	Enclosure Material	Aluminum + Steel
Display Interface	LVDS	Enclosure Color	Black, White front panel option
I/O Ports	1x RS-232/RS-485/CAN and 2x GPIO via terminal block 2x USB2.0 or 1x USB3.0 Type A 2 x USB 2.0 pin header 1x USB Type C 3.0 OTG	Mounting Option	Panel mount or 75 x 75mm VESA mount
Speaker	Optional 1 x mono Class D speaker, up to 2W(4Ω) or stereo line-out	Operating Temperature	0 ~ 60°C (32 ~ 140°F)
Watchdog timer	Built-in	Storage Temperature	-40 ~ 85° C (-40 ~ 185° F)
RTC	Support RTC backup battery	Operating Humidity	10 ~ 95% @ 40°C (Non-Condensing)
Input Voltage	9V - 24V DC or POE (via optional module)	Protection	Front panel IP65 compliant, 3mm Tempered Glass
Display Type	10.1" TFT active matrix LED backlight	Dimensions	256 x 173 x 39.5 mm (10.7" x 6.81" x 1.56")
Display Resolution	1280 x 800	OS Support	Android 10, Yocto Embedded Linux 5.10 kernel, Debian Linux

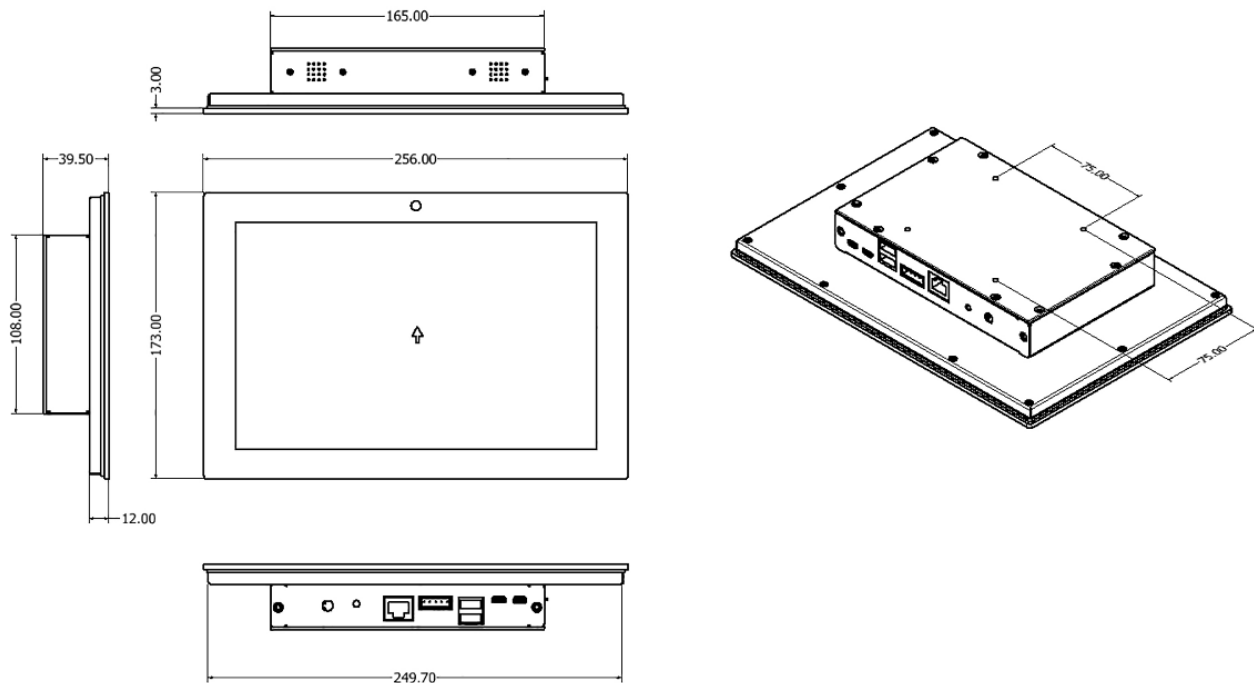
I/O LAYOUT



- A. 3mm Tempered Glass
- B. Mini-HDMI
- C. External WiFi Antenna
- D. USB 3.0 OTG
- E. 2x USB 2.0
- F. 2 x GPIO, 1x RS-232/485/CAN
- G. Ethernet 1 with POE ready
- H. Ethernet 2
- I. 9-24V DC In
- J. 75 x 75mm VESA Mount

DIMENSIONS

Unit: mm



ORDER INFORMATION

Part No.	Description
PPC-4910-MQS	10.1" Panel PC / HMI with i.MX8MP processor, capacitive touch screen, single GbE, 5V DC power input
PPC-4910-MQP	10.1" Panel PC / HMI with i.MX8MP processor, capacitive touch screen, single GbE, POE power input
PPC-4910-DQT	10.1" Panel PC / HMI with i.MX8MP processor, capacitive touch screen, dual GbE, 9-24V DC power input