



Main Features

- The 13th Gen Intel® Core™ i7/i5/i3/U300E processor
- 2 x DDR5 supported, up to 64GB Max
- 2 x M2 SATA and NVMe supported
- 4 x 2.5GbE RJ45 Ethernet
- 1 x USB 3.2 Gen 2x1 (10Gbps) Type-C, with ALT mode
- 2 x USB 3.2 Gen 2x1 (10Gbps) Type-A
- 1 x RS232/422/485 isolated
- 1 x Fan/buzzer external connector
- Support Intel® vPro and TPM 2.0 (vPro is not available for i3 SKU)
- Support 18V~31V DC in
- Certificated CE / FCC Class A
- IEC 60945/IACS E10 Maritime standards compliance

Product Overview

The PPC-120T-RL, powered by 13th Gen Intel® Core™ processor, is a 12.1" marine panel PC featuring an IP65-rated front bezel. Equipped with 10 points P-CAP multi-touch screen with AR coating, along with Auto Dimming function and manual brightness control buttons that adjust the dimming level from 0.1% to 100%, it provides optimal responsiveness, protectiveness, and functionality. The PPC-156T-RL supports Windows 10/11 and Linux, also offers robust connectivity with 4 x Gigabit Ethernet LAN ports, 1 x isolated RS-232/422/485 port, 2 x USB Type-A ports, and 1 x USB Type-C port with DP Alt Mode.

Built to comply with international marine standards including DNVGL-CG-0339, IEC 60945, and IACS E10, the PPC-156T-RL is engineered for durability in harsh maritime environments. It supports a wide operating temperature range of 0°C to 55°C and a power input range of 18V to 31V.

Specifications

CPU Support

- 13th Gen Intel® Core™ processors (embedded)
 - Intel® Core™ i7-1370PE, vPro supported
 - Intel® Core™ i5-1350PE, vPro supported
 - Intel® Core™ i5-1340PE, vPro supported
 - Intel® Core™ i3-1320PE
 - Intel® Processor U300E

Main Memory

- 2 x DDR5, up to 64GB Max, non-ECC and un-buffered

Storage Device

- 2 x M.2 2242 or 2280 (SATA and NVMe)

Touch Panel

- 12.1" WXGA TFT-LCD 1280 x 800/TR12ms/TF 8ms/600nits 1CH 6/8bit LVDS
- 10 points P-Cap multi-touch glass with AR coating
- Resolution: 1280x800
- Color: 262K / 16.7M
- Brightness: 600 cd/m²
- Viewing Angle: 88(T), 88(B), 88(L), 88(R)

Display Option

- Type-C supports ALT mode, resolution up to 4096x2160@60Hz

I/O Interface - Rear

- 1 x DC 24V power input connector with 3 pin terminal blocks
- 1 x Fan/buzzer connector: 2x4 pin Phoenix terminal block
- 1 x COM Port (DB9), supports RS-232/422/485, isolated
- 1 x USB 3.2, 10Gbps, Type-C, supports ALT mode
- 2 x USB 3.2, 10Gbps, Type-A
- 4 x 2.5GbE RJ45 port, supports wake up on LAN

Power Requirements

- Input voltage: 24V DC (+30%/-25% voltage variation)
- Reverse polarity protection
- Galvanic/ Electrical isolated
- Power consumption: 120W (max)

Dimensions

- 307.5mm (L) x 209mm (W) x 65.9mm (D)

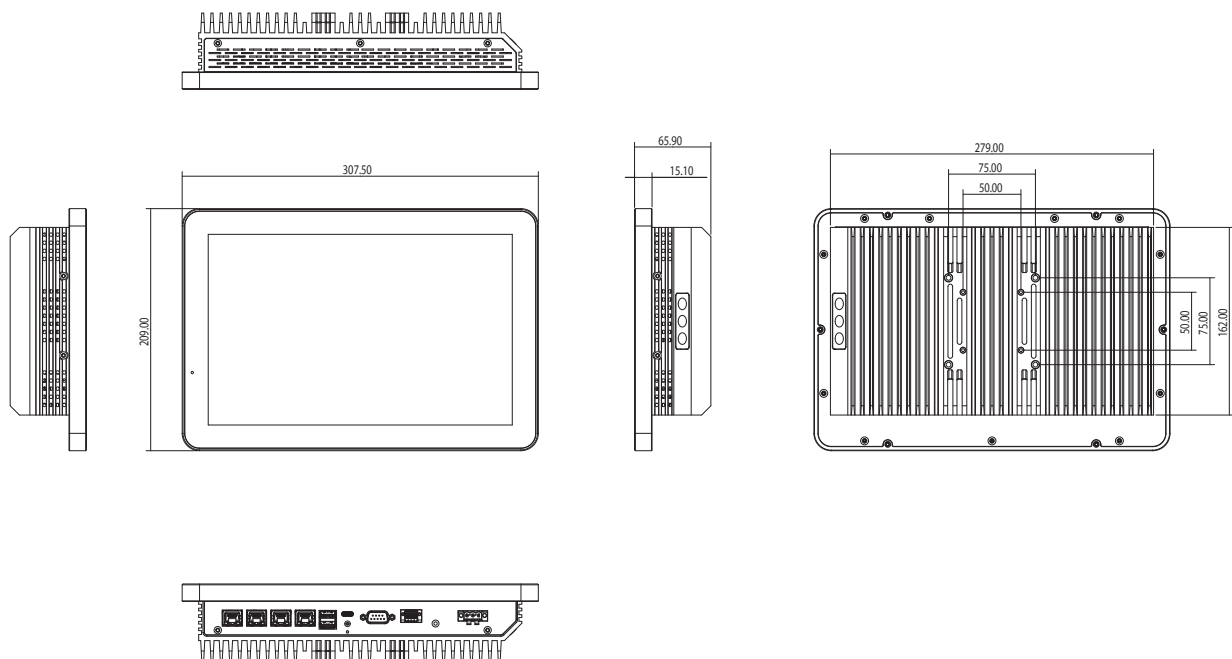
Construction

- Aluminum/Metal chassis with fanless design

Environment

- Operating temperature: 0°C~55°C
- Storage temperature: -30°C~75°C
- Operating humidity: 10%~95%, non-condensing

Dimension Drawing



- Vibration:
 - Compliance with EN 60945 Protected B
 - Vibration compliance with IEC 60068-2-64@Random condition
- Shock:
 - IEC 60068-2-27
 - 20G, 6 directions
 - Drop (Package): IEC 60068-2-32

Certifications

- EN 55032/35
- UKCA
- FCC/IC Class A

Support OS

- Windows 11
- Windows 10

Ordering Information

- ♦ **PPC-120T-RL-i5 (P/N: 10Q00120T07X1)**
i5-1340PE, 16G RAM, 256G M.2 SSD
- ♦ **PPC-120T-RL-i3 (P/N: 10Q00120T08X1)**
i3-1320PE, 16G RAM, 256G M.2 SSD
- ♦ **PPC-120T-RL-U300E (P/N: 10Q00120T09X1)**
U300E, 16G RAM, 256G M.2 SSD