(M)PPC-240T-HW-01

24” Full HD 16:9 Marine Panel PC
with Intel® Core™ i5-4300U, 1.9GHz



Main Features

- 16:9 24" Full HD Marine Panel Computer
- Intel® Core™ i5-4300U, Dual Core, 1.9 GHz
- 24" PCAP touch screen with AR coating
- 4 Gigabit Ethernet/1x DVI-I port for connecting secondary display
- 2 USB 2.0, 2 USB 3 .0
- 1 RS232/422/485 isolated
- DDR3L 4GB/M.2 SATA 128GB
- IP65 compliant front panel
- Full range AC + 24VDC power inputs
- Mounting support: flush/VESA 100mm x 100mm
- IEC-60945 maritime standards compliance

Product Overview

PPC-240T-HW-01 24-inch panel computer features the Intel® Core i5-4300U processor with low power consumption and deliver a reliable, durable, high-performance platform of wide versatility for use in maritime and offshore environments. The panel PC has a touch screen LCD panel with 1920 x 1080 (Full HD) resolution and 300-nit brightness. The front panel which adopts a flush panel design and has IP65 front panel. It offers a projected-capacitive, glove-friendly multi-touch screen for outdoor applications.

PPC-240T-HW-01 has an Isolated RS-232/422/485 port, four Gigabit Ethernet LAN ports, four USB posts, and also comes with a DVI-I port for connecting secondary display, allowing you to extend the screen size and reduce the total cost of system development. The PPC-240T-HW series panel computers are designed with a wide -25°C to 70°C temperature range, supports full range 110/230VAC or 24VDC power inputs and come with a minimalistic and fanless enclosure designed, and satisfy IEC-60945 maritime standards compliance.

Specifications

Panel

- LED size: 24", 16:9
- Resolution: Full HD 1920 x 1080
- Luminance: 300cd/m2
- Contrast ratio: 5000
- LCD color: 16.7M
- Viewing angle: 89(U), 89(D), 89(L), 89(R)
- Backlight: LED

Touch Screen

- Projected capacitive (flush panel type)
- Light transmission: 91%
- Interface: USB
- With AR coating

System

- CPU: onboard Intel® Core™ processor i5-4300U, 1.9GHz, 3M Cache
- BIOS AMI BIOS
- System memory: 2x 204-pin DDR3L SO-DIMM socket, 4GB DDR3L (default), support up to 16GB DDR3L-1066/1333, non-ECC and un-buffered
- Storage device
  - 1x SATA M.2 connector, 128G M.2 SATA (default)
  - 1x mini-PCIe connector
- Graphics: Intel® HD Graphics
- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (tolerance 15% under room temperature 25°C)
- H/W status monitor: monitoring system temperature, and voltage
- Control buttons
  - Poweron/off, reset, brightness
- Backlight control
  - Auto dimming function can be adjust by ambient light sensor
  - Panel backlight can be controlled by software, dimming range from 0% to 100%

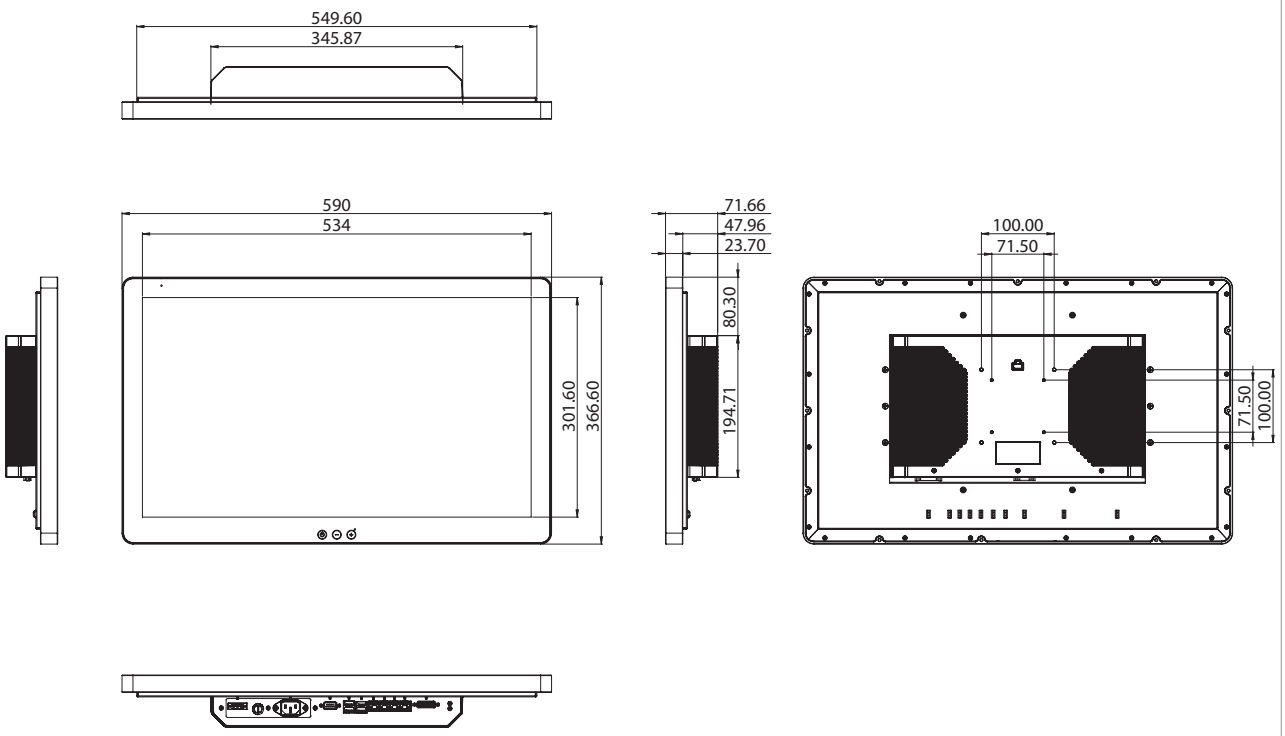
Rear I/O

- Ethernet: 4x RJ45
- 2nd display port: 1x DVI-I port
- USB: 2x USB 2.0, 2x USB 3.0
- COM #1: 1x RS232/422/485
- Power status/ HDD status LEDs
- AC power input connector: IEC 60320 C14 connector
- DC power input connector: 3-Pin Phoenix terminal blocks

EtherNet

- LAN chip: 2x Intel® I210-IT Gigabit LAN + 2x Intel® 82574 Gigabit LAN
- Ethernet interface: 10/100/1000 Mbps
- Support wake up on LAN

Block Diagram



Power Requirements

- AC power input
  - Input voltage: 110/230VAC
  - Power consumption: 28W to 55W
- DC power input
  - Input voltage: 24VDC
  - Reverse polarity protection
  - Galvanic isolated

* Note: only one power source (AC or DC) to be connected. No failover functionality.

Mechanical & Environment

- Fanless system design
- Color
  - Pantone black RAL9005, powder painting for aluminum front bezel
  - Pantone black RAL9005 for backlight button membrane
- IP protection
  - IP65 front bezel
  - IP20 back system
- Mounting: flush/VESA 100mm x 100mm
- Vibration
  - Compliance with EN60945 protected b
  - Sweep 2 Hz – 13.2 Hz at ±1 mm, 13.2 Hz – 100 Hz at 7m/s² and for 2 h on each resonance (Q>5), 2h on one resonance/observed frequency (Q<5), otherwise (Q=0) 2 h at 30 Hz in all three axes, 12 minutes/axis
- Shock
  - IEC 68 2-27
  - 20G @ wall mount, half sine, 11ms
- Operating temperature: -25°C to 70°C
- Storage temperature: -25°C to 75°C
- Operating humidity: 10%~90% relative humidity, non-condensing
- Dimension: 590 x 366.6 x 71.66 mm
- Weight: 9 KG

Certifications

- CE approval
- FCC Class A
- CCC approval
- IEC-60945 maritime standards compliance

Ordering Information

Barebone

- **PPC-240T-HW-01 (P/N: 10M20240T00X0)**
  24" Full HD LED backlight touch panel PC, Intel® Core™ i5-4300U 1.9 GHz, touch screen, 4GB DDR3L, 128G M.2 SATA, 1x RS23/422/485, PCAP control buttons

We reserve the right to change specifications and product descriptions at any time without prior notice.