

# IPPC 1640P

15.6" TFT HD 16:9 Heavy Industrial Panel PC  
with Intel® Celeron® Quad Core Processor J1900, up to 2.42GHz,  
Multi-Touch Screen, 4GB DDR3L, 3 x USB, 2 x COM



## Main Features

- Intel® Celeron® quad core processor J1900, up to 2.42GHz, 2M L2 cache
- Metal housing with robust aluminum front zero bezel for harsh environment
- 10 points P-Cap multi-touch with zero bezel flush front design
- Dual GbE/2nd display-VGA/Line-out
- 3 x USB/2 x mini-PCIe sockets/1 x CFast/2 x RS232/422/485
- DDR3L 4GB/2.5" HDD bracket
- IP66 compliant front panel
- Mounting support: panel/wall/stand/VESA 100mm x 100mm
- Wide range power input 12~30VDC

## Product Overview

The 15.6" fanless panel PC IPPC 1640P incorporating an industrial motherboard is intended for versatile industrial applications. The panel PC has a touch screen LED backlight LCD panel with 1366 x 768 (HD) resolution. The front panel which adopts flush design and complies with IP66 standard makes it the perfect fit in industrial applications.

The IPPC 1640P supports WWAN/WLAN expansion and others via dual Gigabit Ethernet connectors, two mini-PCIe slots and one SIM card holder. With support for wide power input of 12~30VDC, IPPC 1640P can gain a strong foothold in industrial field and machine devices. In addition, IPPC 1640P can hook 2nd display via a VGA port for dual independent display. IPPC 1640P has two isolated RS232/422/485 ports.

## Specifications

### Panel

- LCD size: 15.6", 16:9
- Resolution: HD 1366 x 768
- Luminance: 400cd/m<sup>2</sup>
- Contrast ratio: 500
- LCD color: 16.7M
- Viewing angle: 80 (U), 80 (D), 85 (L), 85 (R)
- Backlight: LED

### Touch

- Ten points P-Cap (projected capacitive touch)
- Touch light transmission: 87%
- Anti-scratch surface: 7H hardness
- Touch interface: USB

### System

- CPU: onboard Intel® Celeron® Quad Core processor J1900, 2.0GHz, 2M L2 Cache (maximum frequency 2.42GHz if turbo boost enabled)
- BIOS: AMI BIOS
- System memory: 2 x 204-pin DDR3L SO-DIMM socket, 4GB DDR3L (default), support up to 8GB DDR3L-1066/1333, non-ECC and un-buffered

### Storage device:

- 1 x External locked CFAST socket
- 1 x Hard drive bay: optional 1 x 2.5" SATA HDD or 1 x SATA DOM
- 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
- Expansion: 2 x mini-PCIe sockets (support optional Wi-Fi, 3.5G module)
- Front LED indicator to show operating status

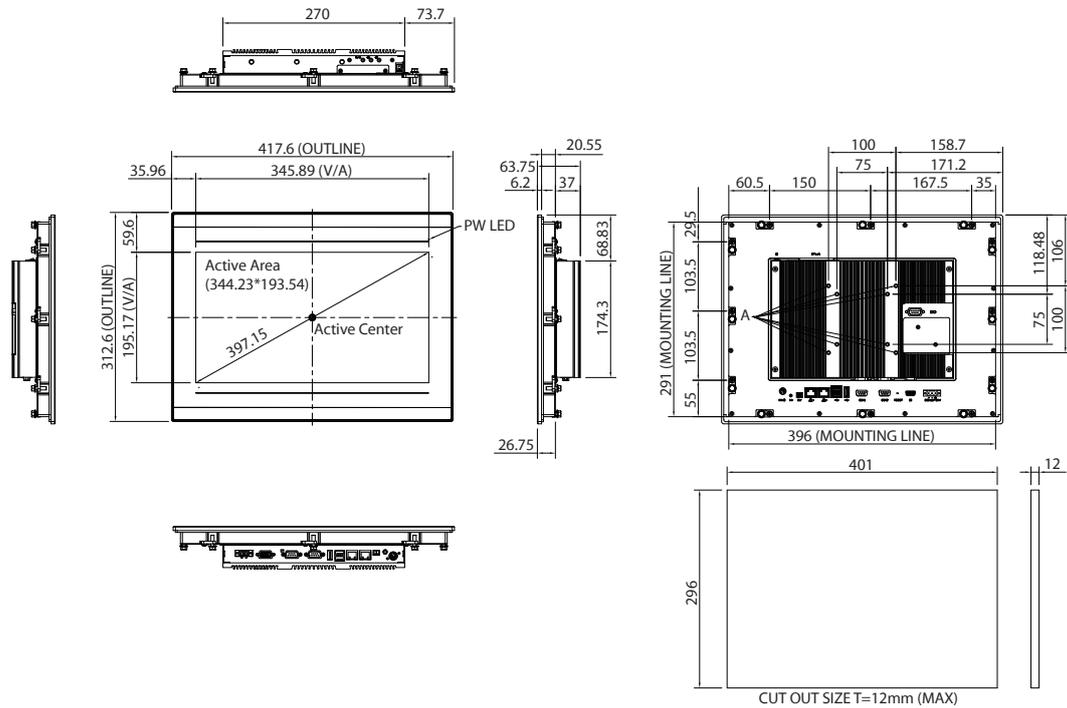
### Rear I/O

- Ethernet: 2 x RJ45
- 2nd display VGA port: 1 x DB15
- Audio port: 1 x Line-out
- USB: 2 x USB 2.0, 1 x USB 3.0
- 2-pin remote power on/off switch
- Power switch
- Reset button
- COM #1: RS232/422/485 w/ 2.5kv isolated
- COM #2: RS232/422/485 w/ 2.5kv isolated

### Audio

- HD codec: Realtek ALC888S-VD2
- Audio interface: Line-out audio jack

## Dimension Drawing



### Ethernet

- LAN chip: dual Intel® I210 Gigabit LAN
- Ethernet interface: 10/100/1000 based-Tx Ethernet compatible

### Mechanical & Environment

- Color: black silver front bezel
- IP protection: IP66 front
- Mounting: panel/wall/stand/VESA 100mm x 100mm
- System with panel mounting kit w/o panel mounting hole
- Power:
  - Power input: 12~30VDC
  - Power adapter: optional AC to DC power adapter (+12V, 60W)
- Vibration:
  - IEC 68 2-64 (w/ HDD)
  - 1Grms @ sine, 5~500Hz, 1hr/axis (HDD operating)
  - 2Grms @ sine, 5~500Hz, 1hr/axis (CFast operating)
  - 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock:
  - IEC 68 2-27
  - HDD: 20G@wall mount, half sine, 11ms
- Temperature:
  - Operating temperature: -10°C to 60°C
  - Storage temperature: -20°C to 75°C
- Operating humidity: 10%~90% relative humidity, non-condensing
- Dimension: 417.4 x 312.4 x 63.75mm
- Weight: 6.4 kg

### Certifications

- CE (including EN61000-6-2/EN61000-6-4)
- FCC class A

### OS Support Lists

- Windows 7 32-bit/64-bit
- Windows 10 64-bit

## Ordering Information

### Barebone

- **IPPC 1640P-C (P/N: 10II1640P12X0)**  
15.6" WXGA LED backlight touch panel PC, Intel® Celeron® quad core processor J1900, up to 2.42GHz, touch screen, 4GB DDR3L, 2 x RS232/422/485, Intel® I210-IT Gigabit LAN
- **IPPC 1640P-C0 (P/N: 10II1640P16X0)**  
15.6" WXGA LED backlight touch panel PC, Intel® Celeron® quad core processor J1900, up to 2.42GHz, touch screen, 4GB DDR3L, 2 x RS232/422/485, Intel® I210-AT Gigabit LAN

### Options

- **12V, 60W AC/DC power adapter w/o power cord (P/N: 7400060062X00)**