

# IPPC 2180P

21.5" TFT Full HD 16:9 Heavy Industrial Panel PC  
6th Generation Intel® Core™ i5-6300U, 2.40 GHz  
Multi-Touch Screen, 8GB DDR3L, 4 x USB, 3 x COM



## Main Features

- 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 DisplayPort/Dual USB 3.0 & USB 2.0
- 1 x mini-PCIe sockets, 1 x M.2, 1 x RS232/422/485
- DDR3L 8GB/2.5" HDD bracket
- IP66 compliant front panel
- Mounting support: panel/wall/stand/VESA 100mm x 100mm
- DC power input 24VDC

## Product Overview

The 21.5" fanless panel PC IPPC 2180P incorporating an industrial motherboard is intended for versatile industrial applications. The panel PC has a touch screen LED backlight LCD panel with 1920 x 1080 (Full HD) resolution. The front panel which adopts flush design and complies with IP66 standard makes it the perfect fit in industrial applications.

The IPPC 2180P supports WLAN expansion and others via dual Gigabit Ethernet connectors, one mini-PCIe slot and one M.2 slot. With support for DC power input of 24VDC, IPPC 2180P can gain a strong foothold in industrial field and machine devices. In addition, IPPC 2180P can hook 2nd display via a DisplayPort for dual independent display. IPPC 2180P has one adjustable RS232/422/485 ports.

## Specifications

### Panel

- LCD size: 21.5", 16:9
- Resolution: FHD 1920 x 1080
- Luminance: 250cd/m2
- Contrast ratio: 5000
- LCD color: 16.7M
- Viewing angle: 89 (U), 89 (D), 89 (L), 89 (R)
- Backlight: LED

### Touch

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

### System

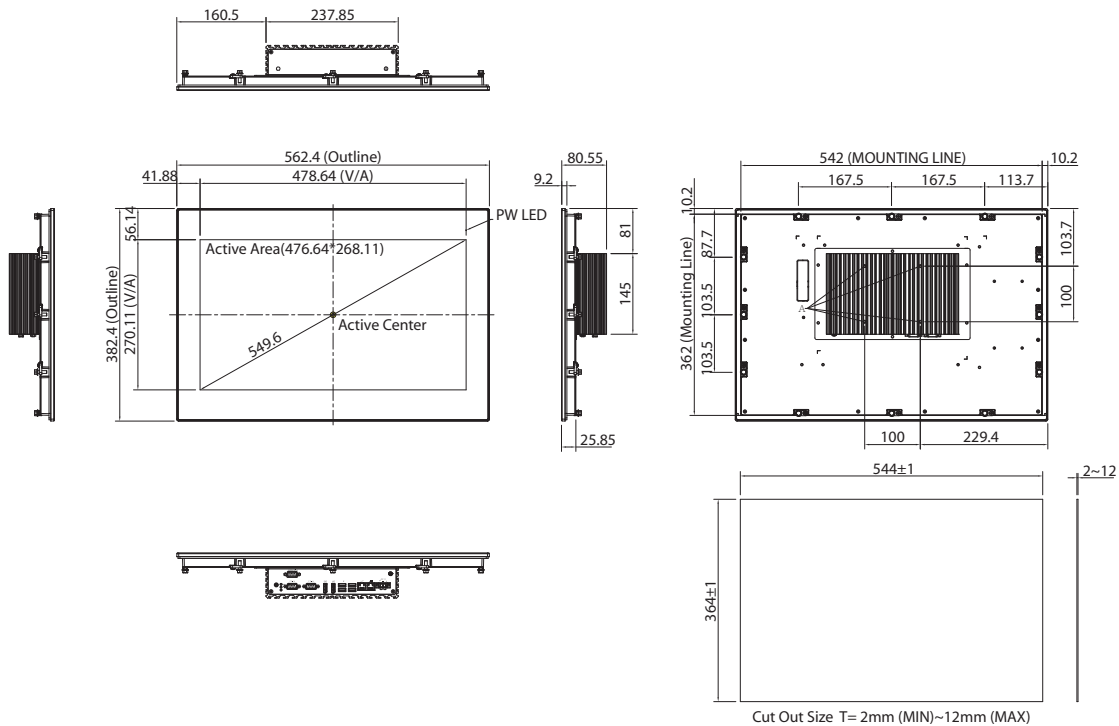
- Support 6th generation Intel®Core™ i5/i3 BGA type processor
  - Core™ i5-6300U, 3M Cache, up to 3.0GHz
  - Core™ i3-6100U, 3M Cache, up to 2.3GHz
- CPU: onboard 6th generation Intel® Core™ i5-6300U Processor, 2.40GHz

- BIOS: AMI BIOS
- System memory: 2 x 204-pin DDR3L SO-DIMM socket, 8GB DDR3L (default), support up to 16GB DDR3L-1866, non-ECC and un-buffered
- Storage device:
  - 1 x M.2 2242 B key socket: optional M.2 2242 storage
  - 1 x Hard drive bay: optional 1 x 2.5" SATA HDD
- 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)
- Expansion: 1 x mini-PCIe sockets (support optional Wi-Fi module)
- Front LED indicator to show operating status

### Rear I/O

- Ethernet: 2 x RJ45
- 2nd DisplayPort: 2 x DP1.2
- USB: 2 x USB 2.0, 2 x USB 3.0
- LED indicator: power/HDD/GPIO programmable LED
- Power button
- COM #1: RS232/422/485
- COM #2&3: RS232

## Dimension Drawing



### Ethernet

- ♦ LAN chip: dual Intel® I210-AT 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: 24 VDC
  - Power adapter: optional AC to DC power adapter (+24V, 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: 0°C to 50°C
  - Storage temperature: -20°C to 75°C
- ♦ Operating humidity: 10%~90% relative humidity, non-condensing
- ♦ Dimension: 562.4 x 382.4 x 80.55 mm
- ♦ Weight: 8.26 kg

### Certifications

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

### OS Support Lists

- ♦ Windows 8.1
- ♦ Windows 10 64-bit

## Ordering Information

### Barebone

- ♦ **IPPC 2180P-6100U (P/N: 10II2180P00X0)**  
21.5" Full HD LED Backlight Touch Panel PC, 6th generation Intel Core i3-6100U Processor, 2.30GHz, P-Cap Touch Screen, 8GB DDR3L
- ♦ **IPPC 2180P-6300U (P/N: 10II2180P01X0)**  
21.5" Full HD LED Backlight Touch Panel PC, 6th generation Intel Core i5-6300U Processor, 2.4GHz, P-Cap Touch Screen, 8GB DDR3L

### Options

- ♦ **24V, 120W AC/DC power adapter w/o power cord (P/N: 7400120023X00)**