

IPPC A1770T/A1770P

17" TFT SXGA 4:3 Heavy Industrial Panel PC
4th Generation Intel® Core™ i Processor



IPPCA 1770T/P-AC



IPPCA 1770T/P-DC

Main Features

- 4:3 17" SXGA Fanless Panel Computer
- Powerful 4th generation Intel® Core™ i processor
- Two expansion slots for add-on PCI or/and PCIe cards
- Optional 3.5G/Wi-Fi module/2.5" HDD/2 x COM/GPIO/DIO/Dimming Control Button
- Front accessible USB2.0 for easy of field maintenance
- Inside USB2.0 type A connector for license key
- Metal housing with robust aluminum IP66 compliant front bezel for harsh environment
- Two FBI ports support fieldbus module, JMobile HMI and CODESYS SoftLogic (optional)
- Wide range 12~30VDC power input

Product Overview

IPPC A1770 series is a heavy industrial panel PC to support powerful 4th generation Intel® Core™ i processor, TFT LCD panel with LED backlight and user-friendly touch screen. It provides two expansion slots to support PROFINET, PROFIBUS, DeviceNet, EtherNet/IP and EtherCAT protocols. The IP66 rated heavy-duty aluminum front bezel and the vibration-resistant rugged chassis are specifically designed for outdoor and harsh industrial environments. IPPC A1770 series is ideal for use in oil and gas rig, wind farms, chemical factories, pharmaceutical factories, and hazardous working area.

Specifications

Panel

- LED Size: 17", 4:3
- Resolution: SXGA 1280 x 1024
- Luminance: 350cd/m²
- Contrast ratio: 1000
- LCD color: 16.7M
- Viewing angle: 80(U), 80(D), 85(L), 85(R)
- Backlight: LED

Touch

For IPPC A1770T series

- 5-wire resistive (Flush panel type)
- Light transmission: 81%
- Interface: USB

For IPPC A1770P series

- Five Points P-Cap (Projected Capacitive Touch)
- Light transmission: 87%
- Interface: USB
- Anti-scratch surface: 7H hardness

System

- CPU (optional): support 4th gen. Intel® Core™ i processor family, LGA1150 socket type
 - Core™ i5-4590T, Quad Core, 3.0GHz, 6M Cache
 - Core™ i3-4350T, Dual Core, 3.1GHz, 4M Cache
 - Pentium® G3320TE, Dual Core, 2.3GHz, 3M Cache
 - Celeron® G1820TE, Dual Core, 2.2GHz, 2M Cache
- BIOS: AMI BIOS
- System chipset: Intel® Q87 PCH
- System memory (optional): 2 x 204-pin DDR3/DDR3L SO-DIMM socket, Support up to 16GB DDR3/DDR3L 1333/1600, non-ECC and unbuffered

Storage device:

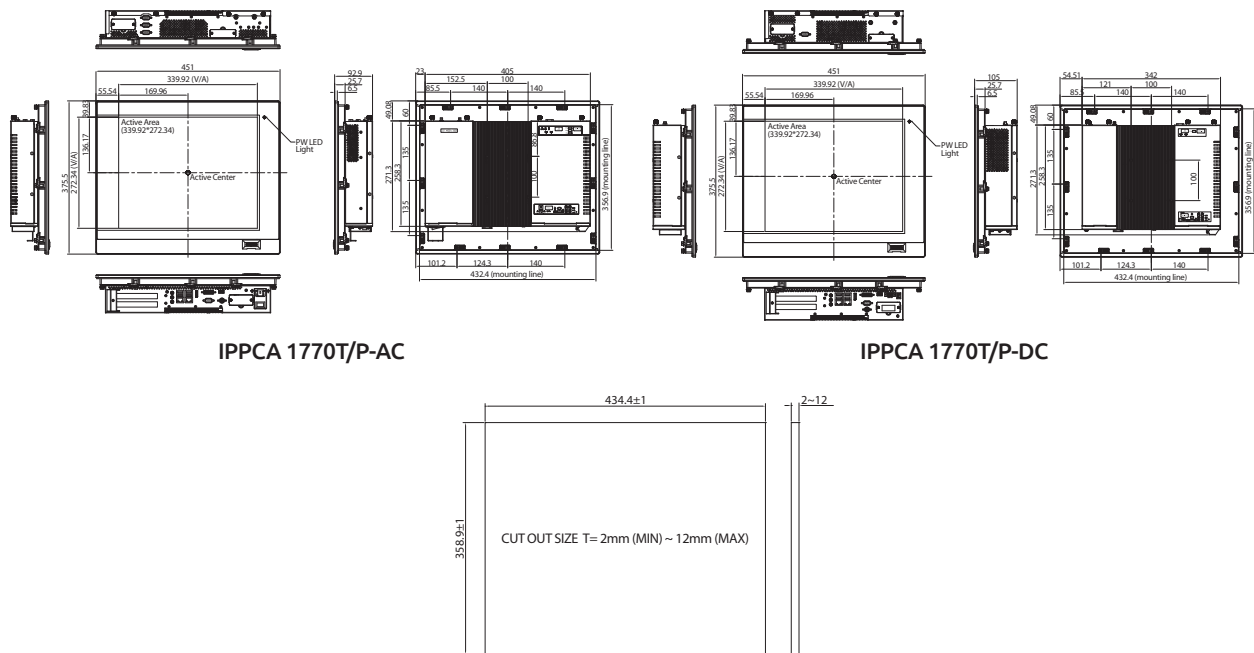
- 1 x external locked CFast socket
- 1 x mini-PCIe w/o SIM Card holder slot to support mSATA storage
- 1 x hard drive bay: support 1 x 2.5" SATA HDD/SSD (optional) (for DC model only)
- 2 x hard drive bay: support 2 x 2.5" SATA HDD/SSD (optional) RAID 0, 1 (for AC model only)
- Watchdog timer: Watchdog 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 or 3.5G module/NVRAM/mSATA storage)
 - 2 x expansion slots for add-on PCI or/and PCIe cards
 - 1 x PCI and 1 x PCIe4 slots
 - 2 x PCIe4 slots (default)
 - 2 x PCI slots
 - 1 x PCIe16 slot
- Panel backlight control button: increase brightness/decrease brightness/backlight on/off (for AC model only)

Rear I/O

For All

- 1 x PS2 for keyboard/mouse
- Ethernet: 2 x RJ45
- 2nd/3rd display: Additional independent display port: 1 x DVIH and 1 x DisplayPort
- Audio port: 1 x Line-out; 1 x Line-in; 1 x MIC-in
- USB: 4 x USB3.0
- 3-pin Remote Power on/off switch connector
- Reset button

Dimension Drawing



For IPPCA 1770T/P-DC only

- COM#1: RS232/422/485 w/ 5V or 12V selection
- ATX power switch

For IPPCA 1770T/P-AC only

- COM#1: RS232/422/485 w/ 2.5kv isolated protection
- AC power switch

Top I/O

For IPPCA 1770T/P-DC only

- COM#2 RS232/422/485 w/ 5V or 12V selection

For IPPCA 1770T/P-AC only

- COM#2: RS232/422/485 w/ 2.5kv isolated protection
- DIO w/ 2.5kv isolated protection:
 - 4 x digital input (source type)
 - 4 x digital output (sink type)
- GPIO: 4 x Digital In/4 x Digital Out

Audio

- HD Codec: Realtek ALC886-GR
- Audio interface: Line-out/Line-in/MIC-in audio Jack

Ethernet

- LAN chip: dual Intel® I210IT Gigabit LAN
- Ethernet interface: 10/100/1000 Based-Tx Ethernet compatible

Fieldbus

- Support up to two Fieldbus Module

Mechanical & Environment

- Color: pantone 432C \ RAL 70 24 front bezel
- Enclosure: aluminum front bezel with SPCC nickel plated housing
- IP protection: IP66 front
- Mounting: panel/wall/stand/VESA 100mm x 100mm
- Power

IPPC A1770TE2-DC/IPPC A1770PE2-DC

- Power input: 12~30 VDC
- Power connector: 3-pin phoenix connector

IPPC A1770TE2-AC/IPPC A1770PE2-AC

- Power input: 100-240V~, 1.5A, 50-60Hz; Fuse: 250VAC/3A
- Power connector: AC inlet (IEC60320 C14)
- Power supply: 120W

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

Operating temperature:

- Resistive: -10°C to 50°C
- P-Cap: -20°C to 50°C

Storage temperature: -20°C to 75°C

Operating humidity: 10%~90% relative humidity, non-condensing

Dimension:

- IPPC A1770TE2-DC/IPPC A1770PE2-DC/IPPC A1770TE2-DC: 451mm x 375.5mm x 105mm
- IPPC A1770TE2-AC/IPPC A1770PE2-AC: 451mm x 375.5mm x 92.9mm

Weight: (Barebone)

- IPPC A1770TE2-DC: 9.54kg
- IPPC A1770PE2-DC: 9.6kg
- IPPC A1770TE2-AC: 10.45kg
- IPPC A1770PE2-AC: 10.51kg

Certifications

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

OS Support Lists

- Windows 7 32bits and 64bits
- Windows 8.1 32 bits and 64 bits

Ordering Information

System

- **IPPC A1770TE2-DC (P/N: 10I1770T00X0)**
17" SXGA LED backlight fanless RTP touch panel PC, 2 x COM, DC power input, and optional fieldbus module
- **IPPC A1770PE2-DC (P/N: 10I1770P00X0)**
17" SXGA LED backlight fanless P-CAP touch panel PC, 2 x COM, DC power input, and optional fieldbus module
- **IPPC A1770TE2-AC (P/N: 10I1770T01X0)**
17" SXGA LED backlight fanless RTP touch panel PC, 2 x COM, AC power input, and optional fieldbus module
- **IPPC A1770PE2-AC (P/N: 10I1770P01X0)**
17" SXGA LED backlight fanless P-CAP touch panel PC, 2 x COM, AC power input, and optional fieldbus module