



Main Features

- 4:3 19" SXGA fanless panel computer
- Powerful 4th generation Intel® Core™ i processor
- Optional two expansion slots for add-on PCI or/and PCIe card
- Optional 3.5G/Wi-Fi module/2.5" HDD
- Front accessible USB 2.0 for easy of field maintenance
- Inside USB 2.0 type A connector for license key
- Metal housing with robust aluminum IP66 compliant front bezel for harsh environment
- Two FBI Windows
- Wide range 12~30VDC power input

Product Overview

IPPC-A1970 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. The IP66 rated heavy-duty aluminum front bezel and the vibration-resistant rugged chassis are specifically designed for outdoor and harsh industrial environments. IPPC-A1970 series is ideal for use in oil and gas rig, wind farms, chemical factories, pharmaceutical factories, and hazardous working area.

Specifications

Panel

- LCD size: 19", 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

- 5-wire resistive (Flush panel type)
- Light transmission: 80±3%
- Interface: USB

System

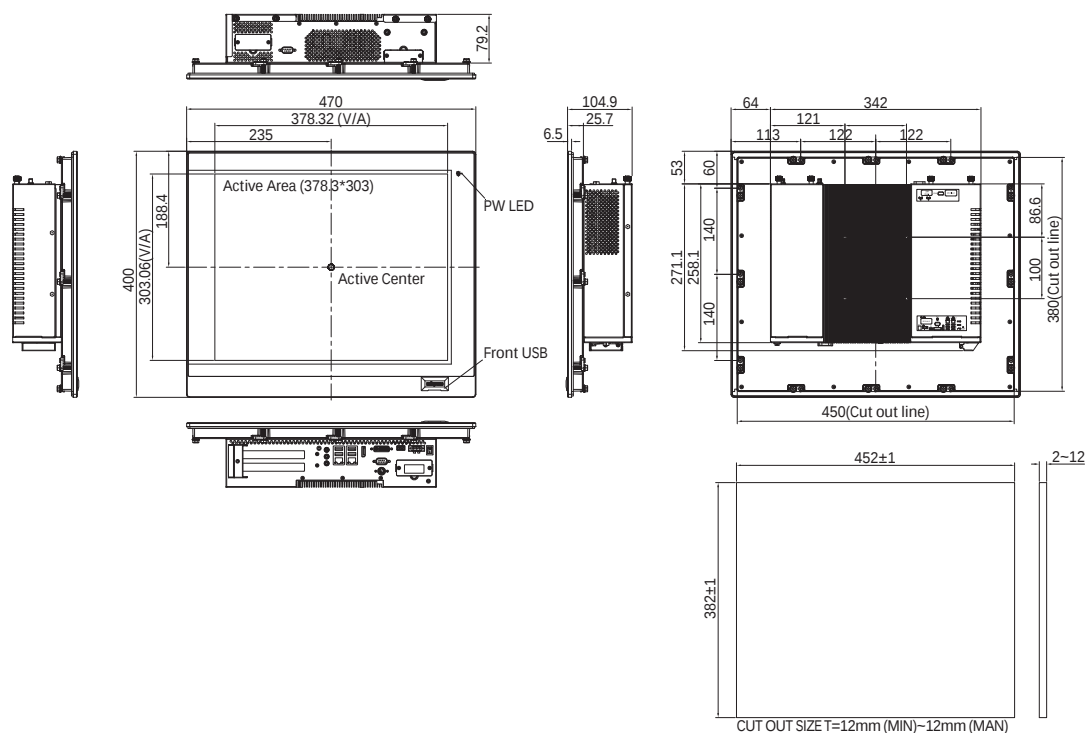
- CPU (optional): support 4th gen. Intel® Core™ i processor family, LGA1150 socket type
 - Core™ i5-4590T, Quad Core, 2.0GHz, 6M Cache (maximum frequency 3.0GHz if turbo boost enabled)
 - Core™ i5-4570TE, Dual Core, 2.7GHz, 4M Cache (maximum frequency 3.3GHz if turbo boost enabled)
 - Core™ i3-4350T, Dual Core, 3.1GHz, 4M Cache (no turbo boost)
 - Core™ i3-4340TE, Dual, Core, 2.6GHz, 4M Cache (no turbo boost)
 - Pentium® G3320TE, Dual Core, 2.3GHz, 3M Cache (no turbo boost)
 - Celeron® G1820TE, Dual Core, 2.2GHz, 2M Cache (no turbo boost)
- 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)
- 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 (optional)
 - 1 x PCI and 1 x PCIe x4 slots
 - 2 x PCIe x4 slots
 - 2 x PCI slots
 - 1 x PCIe x16 slot
- 1 x Front accessible USB 2.0

Rear I/O

- 1 x PS2 for keyboard/mouse
- Ethernet: 2 x RJ45
- 2nd/3rd display: additional independent DisplayPort: 1 x DVI-I (DVI-D + DVI-A) and 1 x DisplayPort
- Audio port: 1 x Line-out; 1 x Line-in; 1 x Mic-in
- USB: 4 x USB 3.0
- 3-pin remote power on/off switch connector
- Reset button
- COM#1: RS232/422/485 w/ 5V or 12V selection
- ATX power switch

Dimension Drawing



Top I/O

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

Audio

- HD codec: Realtek ALC886-GR
- Audio interface: Line-out/Line-in/Mic-in audio jack

Ethernet

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

Fieldbus

- Two FBI Windows

Mechanical & Environment

- Color: Pantone 432C\RAL 70 24 front bezel
- IP protection: IP66 front
- Mounting: panel/wall/stand/VESA 100mm x 100mm
- Power:
 - Power input: 12~30 VDC
 - Power connector: 3-pin PHOENIX connector
- 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
- Storage temperature: -20°C to 75°C
- Operating humidity: 10%~90% relative humidity, non-condensing (for IPPC-A1970T series, limits to be at 90% RH at max 50°C)
- Dimension: 470 x 400 x 104.9 mm
- Weight: 10.3 kg (barebone)

Certifications

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

OS Support Lists

- Windows 7 32-bit and 64-bit
- Windows 10 64-bit

Ordering Information

System

•IPPAC-A1970T-B (P/N: 10II0197001X0)

19" SXGA LED backlight fanless RTP touch panel PC, 2 x COM, DC power input

Optional

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

•NISK37P1E1, one PCI slot and one PCIe x4 slot riser card (P/N: 10JK037P100X0)

•NISK37P2, two PCI slots (P/N: 10JK037P200X0)

•NISK37E2, two PCIe x4 slot (P/N: 10JK037E200X0)

•NISK37E16, one PCIe x16 slot (P/N: 10JK037E101X0)