

APPC 2160-A01

21.5" TFT FHD 16:9 Flush Panel PC with Intel® Processor N97,
Multi-Touch Screen, 8GB DDR5, 3 x COM, 2 x USB, 1 x USB-C



Main Features

- ♦ 16:9 21.5" FHD fanless LED panel computer
- ♦ Intel® Processor N97, Quad Core 2.0GHz, 6M Cache
- ♦ 10 points P-Cap multi-touch with zero bezel flush front design
- ♦ 1 x DDR5 4800MHz with default 8GB installed
- ♦ Additional 2nd Display: 1 x DP/1 x USB-C
- ♦ Dual Intel® 2.5GbE LAN ports, 2 x USB 3.2, 1 x Line out
- ♦ 2 x RS-232/422/485, 1 x RS-232, 1 x Mini PCIe, 2 x M.2
- ♦ IP65 compliant front panel
- ♦ Mounting support: panel/wall/stand/VESA 100mm x 100mm
- ♦ DC power input 24V DC

Product Overview

The new 21.5-inch FHD fanless panel PC APPC 2160-A01, featuring an industrial motherboard, is designed for versatile industrial applications. APPC 2160-A01 supports 1920 x 1080 (FHD) resolution and 500 cd/m2 brightness. Its front panel, with a flush, narrow bezel design, complies with the IP65 standard, making it well-suited for industrial environments.

APPC 2160-A01 includes dual 2.5 Gigabit Ethernet connectors, one mini-PCIe slot, and two M.2 slots to support multiple networks, including LAN, WLAN, and WWAN (5G), as well as various storage options. Additionally, APPC 2160-A01 can connect to a second display via DP and USB-C for dual independent display. Two adjustable RS-232/422/485 ports are also available. APPC 2160-A01 is an ideal choice for general industrial equipment integration.

Specifications

Panel

- ♦ LCD size: 21.5", 16:9
- ♦ Resolution: : FHD 1920 x 1080
- ♦ Luminance: 500cd/m²
- ♦ Contrast ratio: 1000:1
- ♦ 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: 85%
- ♦ Anti-scratch surface: 7H hardness
- ♦ Touch interface: USB

System

- ♦ CPU : Intel® processor N97 (embedded)
- ♦ BIOS: AMI BIOS
- ♦ Support TPM 2.0
- ♦ System memory: 1 x DDR5 SO-DIMM, 8G memory (pre-installed)
- ♦ Storage device
 - 1 x Key B M.2 2242 (SATA)

Rear I/O interface

- ♦ Power button
- ♦ 1 x 2-pin remote power on/off terminal block
- ♦ 24V DC input with 3 pins terminal block
- ♦ 2 x USB 3.2 Type-A
- ♦ 2 x RJ45
- ♦ 1 x DP 1.4a, up to 4K@60Hz
- ♦ 1 x USB Type-C, supports USB 3.2 / DP 1.4a Alt. mode, up to 4K@60Hz
- ♦ DB9 for COM1 & COM2
 - COM1: RS-232/422/485 auto flow control
 - COM2: RS-232/422/485 auto flow control
- ♦ 1 x DB9 for RS-232 support
- ♦ 1 x Line out

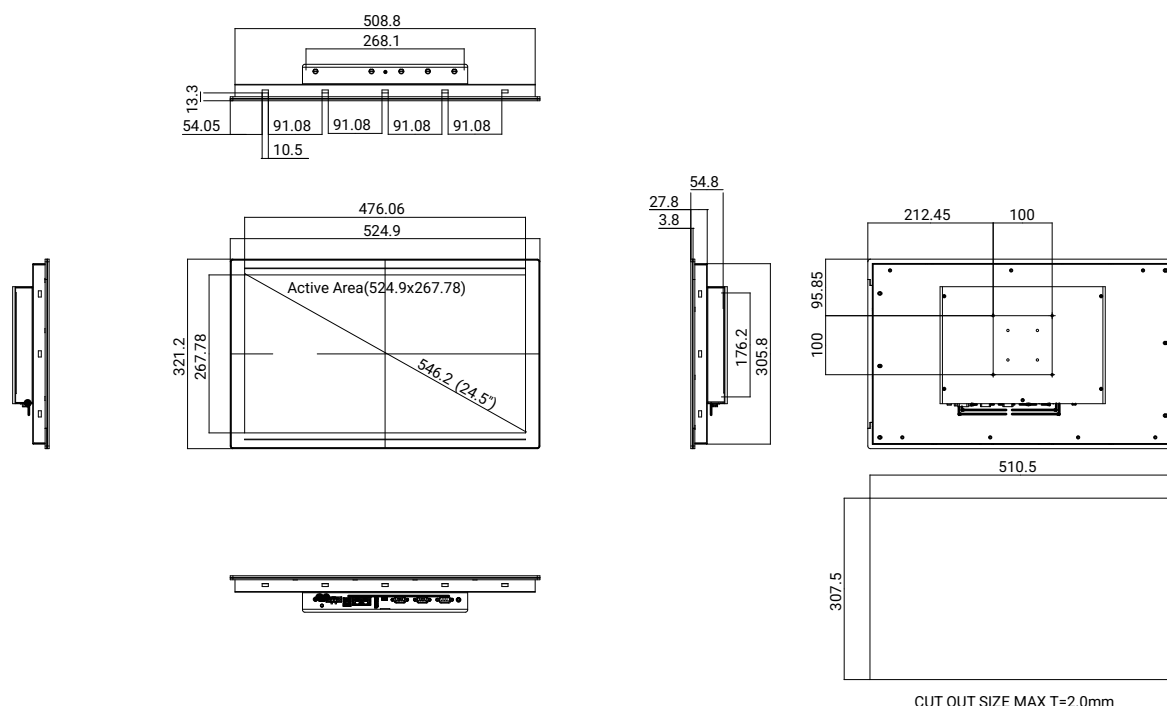
Ethernet

- ♦ LAN chip: dual Intel® I226-IT Gigabit LAN
- ♦ Ethernet interface: 2.5GBase-T Ethernet compatible
- ♦ Support WoL and PXE

Audio

- ♦ HD audio codec: REALTEK ALC888S-VD
- ♦ Audio interface: Line out

Dimension Drawing



Internal Slot

- ♦ 1 x Mini PCIe (PCIe x1, USB 2.0) SIM for Wi-Fi/FBI/LTE
- ♦ 1 x Key B M.2 2242 (SATA) for storage
- ♦ 1 x Key B M.2 2230 / 3042 / 3052 (PCIe X1, USB 3.2, USB 2.0) SIM for 5G/LTE
- ♦ 1 x nano SIM card slot onboard
- ♦ 1 x USB 2.0 Type-A

Mechanical & Environment

- ♦ Color: Pantone 400C/RAL 090 80 10 aluminum front bezel and black silver PC box
- ♦ IP protection: IP65 front
- ♦ Mounting: panel/wall/stand/VESA 100mm x 100mm
- ♦ Power
 - Power input: 24V DC $\pm 20\%$
 - AT/ATX power mode, default: ATX power mode
 - Power adapter: optional AC to DC power adapter (24V DC, 60W)
- ♦ Vibration:
 - 2G@sine, 5~500Hz, 1hr/axis (Panel Mounting operating), IEC60068-2-64
 - 2Grms@random condition, 5~500Hz, 0.5hr/axis (Panel Mounting operating), IEC 60068-2-64
 - 1G@sine, 5~500Hz, 1hr/axis (VESA Mounting operating), IEC60068-2-64
 - 1Grms@random condition, 5~500Hz, 0.5hr/axis (VESA Mounting operating), IEC 60068-2-64
- ♦ Shock:
 - 20G@wall mount, half sine, 11ms, IEC 60068-2-27
- ♦ Temperature:
 - Operating temperature: 0°C to 50° (Ambient with air flow)
 - Storage temperature: -20°C to 75°C
- ♦ Operating humidity: 10% to 90%, non-condensing (limits to be at 90% RH at max 40°C; limits to be at 44% RH at max 50°C)
- ♦ Dimension: 524.9mm x 321.2mm x 61.8mm
- ♦ Weight: 7.23g

Certifications

- ♦ CE approval (EN 55032, EN 55035)
- ♦ FCC Class A

OS Support Lists

- ♦ Windows 11
- ♦ Windows 10, 64bit

Ordering Information

Barebone

- ♦ **APPC 2160-A01 (P/N: 10IA2160C01XE)**
21.5" FHD LED backlight touch panel PC, Intel® N97 up to 3.6GHz, Multi-Touch screen, 8GB DDR5, 2 x RS-232/422/485, 1 x RS-232, 2 x Intel® I226-IT Gigabit LAN

Options

- ♦ **24V, 60W AC/DC power adapter w/o power cord (P/N:7400060054X00)**