

# APPC 1930T/1931T

19" TFT SXGA 4:3 Flush Panel PC with Intel® Atom™ D2550, 1.86GHz, Touch Screen, 1GB DDR3, 4x USB, 4x COM and VGA



## Main Features

- ♦ 4:3 19" SXGA Fanless LED Panel Computer
- ♦ Intel® Atom™ D2550, Dual Core, Low Consumption CPU
- ♦ Flush Panel by 5-wire Touch Screen
- ♦ Dual GbE/ 2nd display-VGA/ Line-in/ Line-out/ MIC-in/ PS2 KB/MS
- ♦ USB x4/ 2x Mini-PCle sockets/ 1x CFast/ 2x RS232/422/485
- ♦ Optional 3.5G/ Wi-Fi Module / 2.5" HDD / 2 x COMs / GPIO / DIO
- ♦ DDR3 1GB/ 2.5" HDD Bracket
- ♦ IP65 Compliant Front Panel
- ♦ Mounting Support: Panel/ Wall/ Stand/ VESA 100mm x 100mm
- ♦ Wide Range Power Input 12V~ 30V DC

## Product Overview

The 19" fanless panel PC APPC 1930T/1931T incorporating an industrial motherboard is intended for versatile industrial applications. The panel PC has a touch screen LED backlight LCD panel with 1280x1024 (SXGA) resolution. The front panel which adopts flush design and complies with IP65 standard makes it the perfect fit in industrial applications.

The APPC 1930T/ 1931T supports WWAN/WLAN expansion and others via dual Gigabit Ethernet connectors, two Mini-PCle slots and one SIM card holder. With support for wide power input of 12V~30V, APPC 1930T/1931T can gain a strong foothold in industrial field and machine devices. In addition, APPC 1930T/ 1931T can hook 2nd display via a VGA port for dual independent display. APPC 1931T has two isolated RS232/422/485 ports, two RS232 ports supporting 5V and 12V power feed, four isolated channels of DI and DO, and two channels of GPI and GPO.

## Specifications

### Panel

- ♦ LED Size: 19", 4:3
- ♦ Resolution: SXGA 1280x1024
- ♦ Luminance: 350cd/m<sup>2</sup>
- ♦ Contrast ratio: 1000
- ♦ LCD color: 16.7M
- ♦ Viewing Angle: 80(U), 80(D), 85(L), 85(R)
- ♦ Backlight: LED

### Touch Screen

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

### System

- ♦ CPU: On-board Intel® Atom™ Dual Core processor D2550, 1.86GHz, 1M L2 Cache
- ♦ BIOS: AMI BIOS
- ♦ System chipset: Intel® NM10 Express chipset
- ♦ System memory: 2x 204-pin DDR3 SO-DIMM socket, 1G DDR3 (Default), Support up to 4GB DDR3-800/1066, Non-ECC and Un-buffered

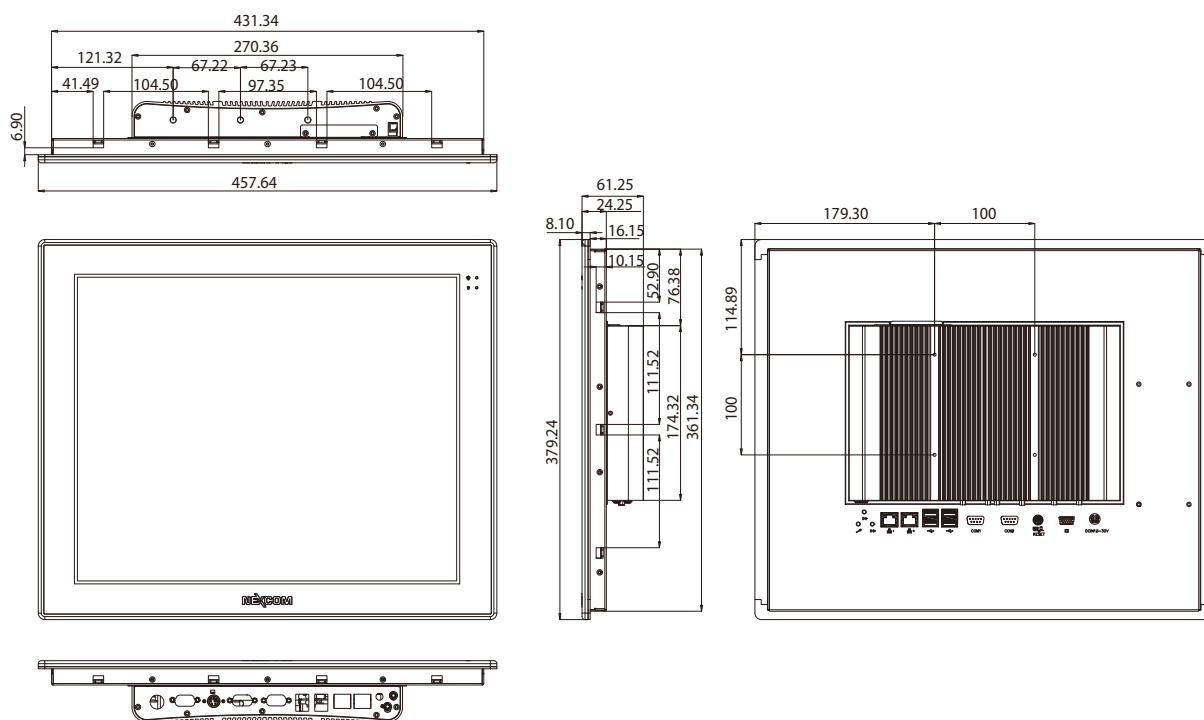
### Storage Device:

- 1x external locked CFast socket
- 1x hard drive bay: optional 1x 2.5" SATA HDD or 1x 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: 2x Mini-PCle sockets (support optional Wi-Fi or 3.5G module)
- ♦ Panel backlight control button: Increase brightness / decrease brightness / Backlight On/Off (For APPC 1931T only)

### Rear I/O

- ♦ Ethernet: 2x RJ45
- ♦ 2nd display VGA port: 1x DB15
- ♦ Audio port: 1x Line out; 1x Line in; 1x MIC-in
- ♦ USB: 4x USB 2.0
- ♦ PS2 keyboard/ mouse
- ♦ Power switch
- ♦ Reset button
- ♦ COM #1: RS232/422/485 w/RI or 5V selection

## Dimension Drawing



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

For APCC1931T only

- DIO w/ 2.5kv isolated:
  - 4x Digital Input (Source type)
    - Input Voltage (Dry Contact): Logic 0: Close to GND
    - Logic 1: Open
  - Input Voltage: Logic 0: 3V max
  - Logic 1: +5V ~ +30V
- 4x Digital Output (Sink type)
  - Output Voltage: 3.6V~5V
  - Sink current: 200 mA max. per channel
- GPIO: 2x digital in/ 2x digital out
- COM #1: RS232/422/485 w/ 2.5kv isolated
- COM #2: RS232/422/485 w/ 2.5kv isolated
- COM #3: RS232 w/ RI or 5V selection
- COM #4: RS232 w/ RI or 12V selection

### Audio

- AC97 codec: Realtek ALC886-GR
- Audio interface: Line out/ Line in/ MIC-in Audio Jack

### Ethernet

- LAN chip: dual Intel® 82574L Gigabit LAN
- Ethernet interface: 10/100/1000 Based-Tx Ethernet compatible

### Mechanical & Environment

- Color: pantone blackRAL 15 00 front bezel w/ Pantone 400C\RAL 090 80 10 metal style membrane
- IP protection: IP65 front
- Mounting: panel/ wall/ stand/ VESA 100mm x 100mm
- Power input: 12V~30VDC
- Power adapter: Optional AC to DC power adaptor (+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
- Operating temperature: -5°C to 50°C
- Storage temperature: -20°C to 75°C
- Operating humidity: 10%~90% relative humidity, non-condensing  
Limits to be at 90% RH at max 50°C
- Dimension: 457.64 x 379.24 x 61.25 mm
- Weight: 6.5 Kg

### Certifications

- CE approval
- FCC Class A

## Ordering Information

### Barebone

- **APPC 1930T (P/N: 10IA1930T00X0)**  
19" SXGA LED Backlight Touch Panel PC, Intel® Atom™ D2550 1.86 GHz, touch screen, 1GB DDR3, 2x RS232/422/485
- **APPC 1931T (P/N: 10IA1931T00X0)**  
19" SXGA LED Backlight Touch Panel PC, Intel® Atom™ D2550 1.86 GHz, touch screen, 1GB DDR3, 2x RS232/422/485 and 4x4 DIO with isolated protection, 2x RS232, 2x2 GPIO, Brightness adjustment buttons

### Options

- **12V, 60W AC/DC power adapter w/o power cord (P/N: 7400060002X00)**