

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

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.

### Features

- 4:3 19" 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 x 4/ 2 x mini-PCle sockets/ 1 x CFast/ 2 x 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



## 19" TFT SXGA 4:3 Flush Panel PC APPC 1930T / 1931T



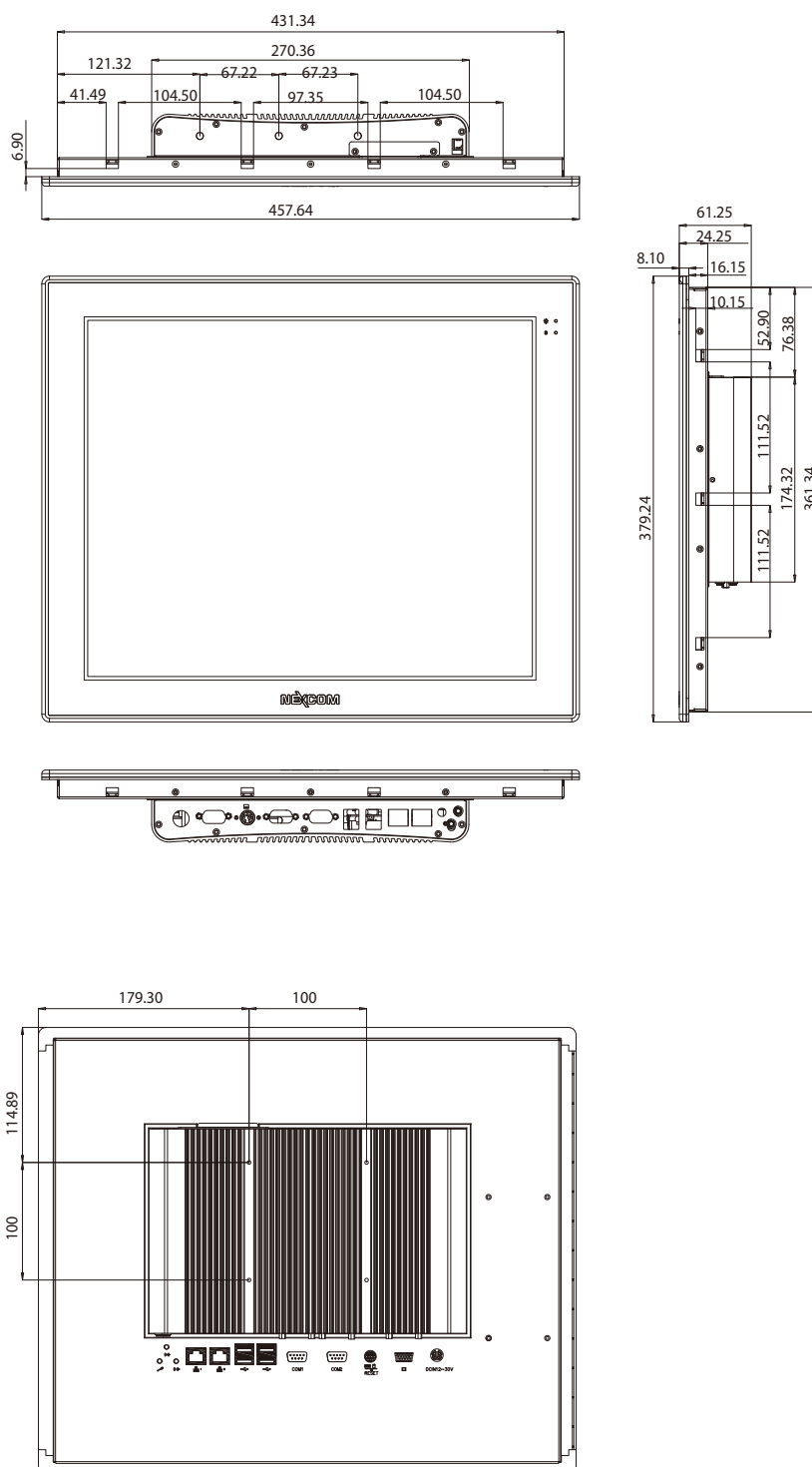
Specifications: see next page

Panel	
LCD 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	
Touch screen	5-wire resistive (flush panel type)
Touch light trans- mission	81%
Touch 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	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-PCIe sockets (support optional WiFi or 3.5G module)
Panel backlight control button	Increase brightness / decrease brightness / Backlight On/Off (For APPC1931T only)
Rear I/O	
Ethernet: 2 x RJ45 2nd display VGA port: 1 x DB15 Audio port: 1 x Line out; 1 x Line in; 1 x MIC-in USB: 4 x USB 2.0 PS2 keyboard/ mouse Power switch Reset button COM #1: RS232/422/485 w/RI or 5V selection COM #2: RS232/422/485 w/RI or 12V selection	
Rear I/O For APPC1931T 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: 2 x digital in / 2 x 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\RAL090 80 10 metal style membrane
IP protection	IP65 front
Mounting	panel/ wall/ stand/ VESA 100mm x 100mm
Power input	12V~ 30V DC
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 temp. Storage temp.	-5°C to 50°C -20°C to 75°C
Operating humidity	10%~90% relative humidity, non-condensing Limits to be at 90% RH at max 50°C
Dimensions	457.64 x 379.24 x 61.25 mm
Weight	6.5 Kg
Certifications	
• CE approval • FCC Class A	
Part numbers	
APPC 1930T 10IA1930T00X0	19" SXGA LED Backlight Touch Panel PC, Intel® Atom™ D2550 1.86 GHz, touch screen, 1GB DDR3, 2xRS232/422/485
APPC 1931T 10IA1931T00X0	19" SXGA LED Backlight Touch Panel PC, Intel® Atom™ D2550 1.86 GHz, touch screen, 1GB DDR3, 2xRS232/422/485 and 2x2 DI/O with isolated protection, 2xRS232, 4x4 GPI/O, Brightness adjustment buttons
Option 7400060002X00	12V, 60W AC/DC power adapter w/o power cord

Specifications are subject to change without notice.

Specifications: see next page



- **Monitors**

- Desktop Monitors
- Large screen Monitors
- Custom-made Monitors
- 19" Rack Mount Monitors
- Rear Mount Monitors
- Monitors for Panel Mount
- Monitors for VESA Mount
- Kiosks
- Accessories

- **Monitors – Specific applications**

- Stainless Steel Monitors
- Car Displays
- Marine Monitors
- Military Monitors
- Replacement Monitors
- Train Monitors

- **Panel PC's**

High Performance Systems  
Custom made Panel PC's  
Low Power Systems  
Extreme environments

- **Pointing devices**

- Accessories
- Touchpads
- Trackballs
- Trackball Modules
- Joysticks
- Custom made Pointing Devices

- **Keyboards**

- Desktop Keyboards with or without pointer
- Built-in Keyboards with or without pointer
- Cables & Connectors
- Custom made Keyboards



Mulder-Hardenberg, est. 1927, is the answer to professional demands in the domain of electronic related environments. We don't just sell products. We use our multidiscipline knowledge to provide the best possible solution, designed to your specific interest.

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