

# APPC 1230T/1231T

12.1" TFT SVGA 4:3 Flush Panel PC with  
Intel® Atom™ D2550, 1.86GHz,  
Touch Screen, 2GB DDR3, 4x USB, 4x COM and VGA



## Main Features

- ♦ 4:3 12.1" SVGA 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/ 2x COMs / GPIO / DIO
- ♦ DDR3 2GB/ 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 12.1" fanless panel PC APPC 1230T/ 1231T incorporating an industrial motherboard is intended for versatile industrial applications. APPC 1230T/ 1231T has a touch screen LED backlight LCD panel with 800x600 (SVGA) resolution and 450-nit brightness. The front panel which adopts flush design and complies with IP65 standard makes it the perfect fit in industrial applications.

This APPC series 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, this APPC series can gain a strong foothold in industrial field and machine devices. In addition, this APPC series can hook 2nd display via a VGA port for dual independent display. APPC 1231T 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: 12.1", 4:3
- ♦ Resolution: SVGA 800x600
- ♦ Luminance: 450cd/m<sup>2</sup>
- ♦ Contrast ratio: 700
- ♦ LCD color: 16.2M
- ♦ Viewing Angle: 65(U), 75(D), 80(L), 80(R)
- ♦ Backlight: LED

### Touch Screen

- ♦ 5-wire resistive (flush panel type)
- ♦ Light transmission: 80%
- ♦ 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, 2GB DDR3 (Default), Support up to 4GB DDR3-800/1066, Non-ECC and Un-buffered

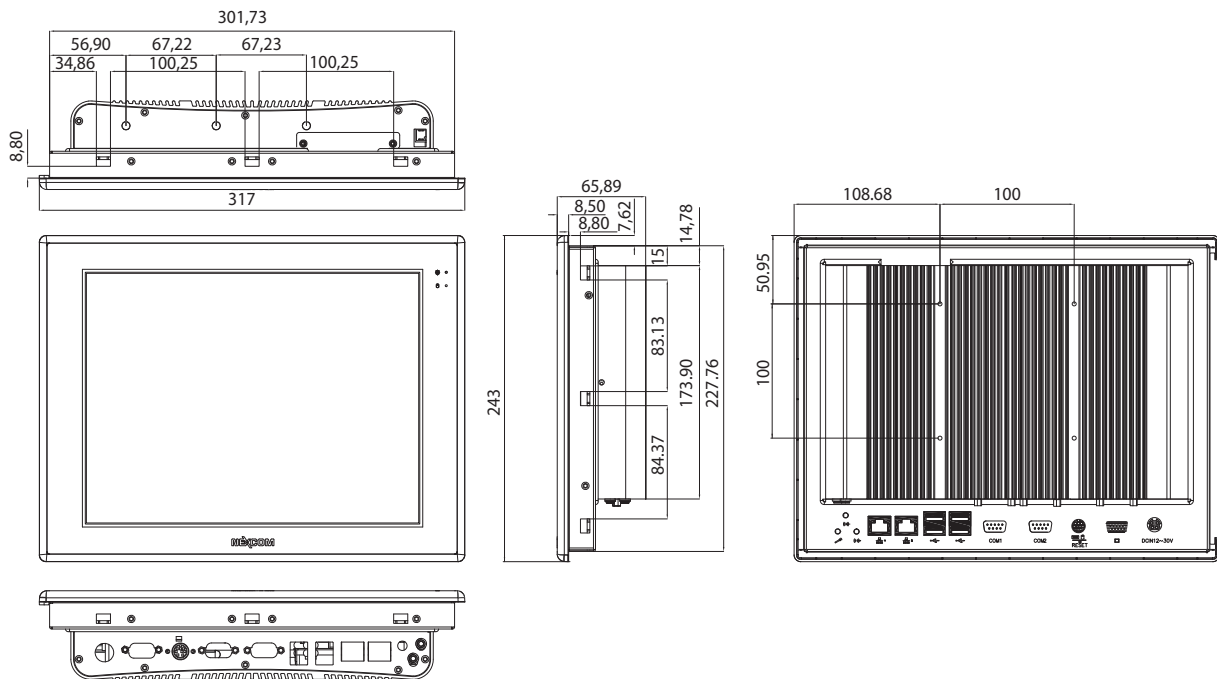
### Storage Device:

- 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 APPC1231T 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
- ♦ COM #2: RS232/422/485 w/RI or 12V selection

## Dimension Drawing



For APPC1231T 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 60°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: 317 x 243 x 65.89mm
- ♦ Weight: 3.9 Kg

### Certifications

- ♦ CE approval
- ♦ FCC Class A

## Ordering Information

### Barebone

#### ♦ APPC 1230T-2G (P/N: 10IA1230T02X0)

12.1" SVGA LED Backlight Touch Panel PC, Intel® Atom™ D2550  
1.86 GHz, touch screen, 2GB DDR3, 2x RS232/422/485

#### ♦ APPC 1231T-2G (P/N: 10IA1231T02X0)

12.1" SVGA LED Backlight Touch Panel PC, Intel® Atom™ D2550  
1.86 GHz, touch screen, 2GB 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: 7400060017X00)