

# APPC 1230T/1231T

12.1" TFT SVGA 4:3 Flush Panel PC with Intel® Atom™ D2550, 1.86GHz, Touch Screen, 2GB DDR3, 4 x USB, 4 x 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 x 4/2 x Mini-PCIe sockets/1 x CFast/2 x RS232/422/485
- Optional 3.5G/Wi-Fi Module/2.5" HDD/2 x 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~30VDC

## 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 800 x 600 (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-PCIe 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 800 x 600
- 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: 2 x 204-pin DDR3 SO-DIMM socket, 2GB DDR3 (Default), Support up to 4GB DDR3-800/1066, Non-ECC and Un-buffered
- Storage Device:
  - 1 x external locked CFast socket
  - 1 x hard drive bay: optional 1 x 2.5" SATA HDD or 1 x 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: 2 x Mini-PCIe sockets (support optional Wi-Fi or 3.5G module)
- Panel backlight control button: Increase brightness/decrease brightness/Backlight On/Off (For APPC 1231T only)

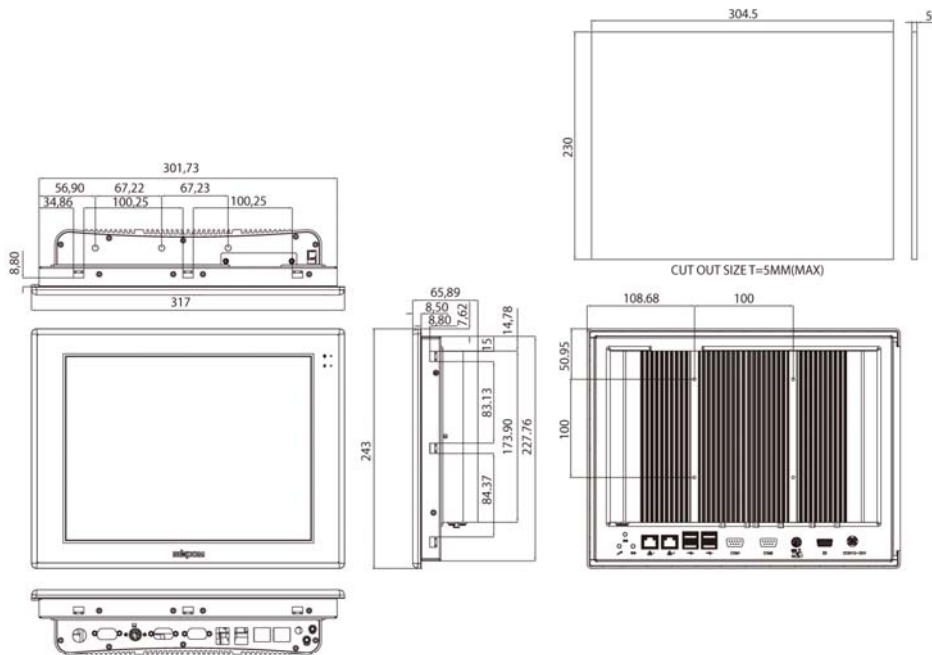
### Rear I/O

- 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 USB2.0
- 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

### For APPC1231T only

- DIO w/ 2.5kv isolated:
  - 4 x 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
- 4 x Digital Output (Sink type)

## Dimension Drawing



- 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 black\RAL 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, 2 x 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, 2 x RS232/422/485 and 4 x 4  
DI/O with isolated protection, 2 x RS232, 2 x 2 GPI/O, Brightness  
adjustment buttons

### Options

- **12V, 60W AC/DC power adapter w/o power cord  
(P/N: 7400060017X00)**