

APPC 1230T/1231T/1235T

12.1" TFT 4:3 Flush Panel PC with
Intel® Atom™ D2550, 1.86GHz



Main Features

- ♦ 4:3 12.1" 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

Product Overview

The 12.1" fanless panel PC APPC 1230T/ 1231T/ 1235T 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 while APPC 1235T supports 1024x768 (XGA) resolution and 500-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

APPC 1230T/ APPC 1231T

- ♦ LED Size: 12.1", 4:3
- ♦ Resolution: SVGA 800x600
- ♦ Luminance: 450cd/m2
- ♦ Contrast ratio: 700
- ♦ LCD color: 16.2M
- ♦ Viewing Angle: 65(U), 75(D), 80(L), 80(R)
- ♦ Backlight: LED

APPC1235T

- ♦ LED Size: 12.1", 4:3
- ♦ Resolution: XGA 1024x768
- ♦ Luminance: 500cd/m2
- ♦ Contrast ratio: 700
- ♦ LCD color: 16.2M
- ♦ Viewing Angle: 80(U), 80(D), 80(L), 80(R)
- ♦ Backlight: LED

Touch

- ♦ Touch screen: 5-wire resistive (flush panel type)
- ♦ Touch light transmission: 80%
- ♦ Touch interface: USB

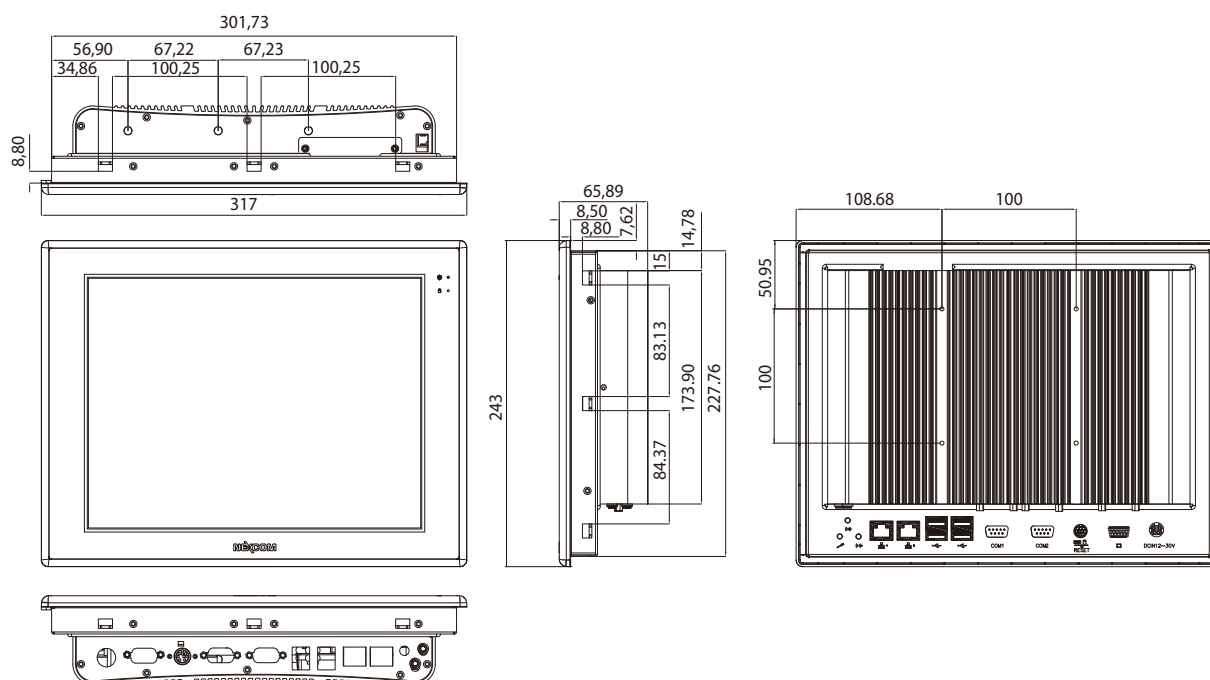
System

- ♦ 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 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 WiFi or 3.5G module)
- ♦ Panel backlight control button: Increase brightness / decrease brightness / Backlight On/Off (For APPC1231T only)

Rear I/O

- ♦ Ethernet: 2 x RJ45

Dimension Drawing



- 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

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: 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 400RAL 090 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 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: 311 x 243 x 65.89mm
- Weight: 3.9 Kg

Certifications

- CE approval
- FCC Class A

Ordering Information

Barebone

- **APPC 1230T (P/N: 10IA1230T00X0)**
12.1" SVGA LED Backlight Touch Panel PC, Intel® Atom™ D2550 1.86 GHz, touch screen, 1GB DDR3, 2xRS232/422/485
- **APPC 1231T (P/N: 10IA1231T00X0)**
12.1" SVGA LED Backlight Touch Panel PC, Intel® Atom™ D2550 1.86 GHz, touch screen, 1GB DDR3, 2xRS232/422/485 and 2x2 DIO with isolated protection, 2xRS232, 4x4 GPIO, Brightness adjustment buttons
- **APPC 1235T (P/N: 10IA1235T00X0)**
12.1" XGA LED Backlight Touch Panel PC, Intel® Atom™ D2550 1.86 GHz, touch screen, 1GB DDR3, 2xRS232/422/485

Options

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