

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

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.

### 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

## 12.1" TFT 4:3 Flush Panel PC APPC 1230T / 1231T / 1235T



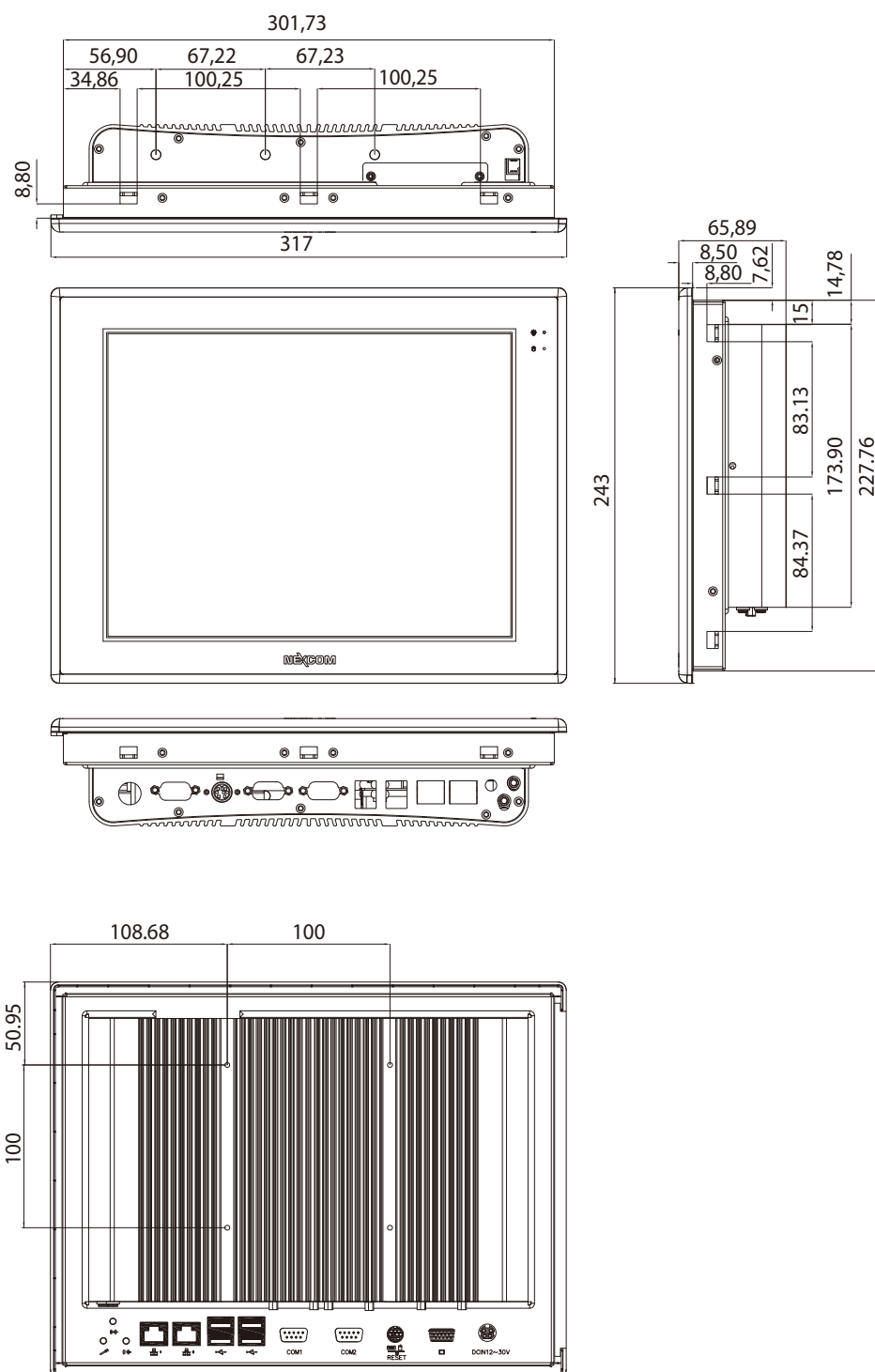
Specifications: see next page

| APPC 1230T/ APPC 1231T Panel   |  |
|--------------------------------|--|
| LCD 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 Panel                |  |
| LCD 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                            | 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 Unbuffered   |
| Storage                        | 1x external locked CFast socket<br>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 APPC1231T 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  |
| Keyboard / mouse               | PS/2   |
| Power / Reset                  | Power switch / Reset button  |
| COM #1                         | RS232/422/485 w/RI or 5V selection   |
| COM #2                         | RS232/422/485 w/RI or 12V  |

| Rear I/O for APPC1231T only      |   |
|----------------------------------|---|
| DIO w/ 2.5kv isolated            | 4x Digital Input (Source type)<br>- Input Voltage (Dry Contact): Logic 0: Close to GND<br>- Logic 1: Open<br>- Input Voltage: Logic 0: 3V max<br>- Logic 1: +5V ~ +30V<br><br>4x Digital Output (Sink type)<br>- Output Voltage: 3.6V ~ 5V<br>- Sink current: 200 mA max. per channel |
| GPIO                             | 2 x digital in / 2 x digital out  |
| COM #1 & 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)<br>0.5Grms @sine, 5~500Hz, 1hr/axis (HDD Operating)<br>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.<br>Storage temp. | -5°C to 50°C<br>-20°C to 75°C   |
| Operating humidity               | 10%~90% relative humidity, non-condensing<br>Limits to be at 90% RH at max 50°C   |
| Dimensions                       | 311 x 243 x 65.89mm   |
| Weight                           | 3.9 Kg  |
| Certifications                   |   |
| • CE approval • FCC Class A      |   |
| Part numbers                     |   |
| APPC 1230T<br>10IA1230T00X0      | 12.1" SVGA LED Backlight Touch Panel PC, Intel® Atom™ D2550 1.86GHz, touch screen, 1GB DDR3, 2xRS232/422/485  |
| APPC 1231T<br>10IA1231T00X0      | 12.1" SVGA LED Backlight Touch Panel PC, Intel® Atom™ D2550 1.86GHz, touch screen, 1GB DDR3, 2xRS232/422/485 and 2x2 DI/O with isolated protection, 2xRS232, 4x4 GPI/O, Brightness adjustment buttons   |
| APPC 1235T<br>10IA1235T00X0      | 12.1" XGA LED Backlight Touch Panel PC, Intel® Atom™ D2550 1.86GHz, touch screen, 1GB DDR3, 2xRS232/422/485   |
| Option<br>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



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