

# APPC 1220T/1221T

12" TFT LED SVGA 4:3 Flush Panel PC with Intel® Atom™ D525,  
1.8GHz, Touch Screen, 1GB DDR3, 4xUSB, 4xCOM and VGA



## Main Features

- 4:3 12.1" Fanless LED Panel Computer
- Intel® Atom™ D525, 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/ 1 x CF/ 2 x RS232/ 422/ 485
- Optional Wi-Fi Module / 2.5" HDD / 2 x COMs / GPIO / CAN Bus
- DDR3 1GB / 2.5" HDD Bracket
- IP65 Compliant Front Panel
- Mounting Support: Panel/ Wall/ Stand/ VESA 100mmx100mm
- Wide Range Power Input 12V~ 30V DC

## Product Overview

Incorporated a 12.1" 4:3 touch screen LCD panel with resolutions up to 800x600 (SVGA) and 450 nits brightness, industrial motherboard for versatile industrial applications, the APPC 1220T is fanless Panel PC based on the Atom™ D525 processor. The Panel PC comes with flush panel design and can have IP65 front for industrial applications. The touch screen provides the durable, reliable, and scratch-able benefits for easy maintenance in wide applications, especially for food and beverage industrial, which require strictly cleaning process.

The APPC 1220T Panel PC has 2GbE LAN, 2 x COMs, 2x USB, PS2 KB/MS, and Line-in/Line-out/MIC-in. With wide range power input from 12V to 30V, the APPC series can have industrial field and machine devices. With 2nd display by VGA, APPC series can hook 2nd display via VGA port with different content. Depending on applications, customers can easily remove rear chassis to implement DDR3 memory, 2.5" HDD and 2 x Mini-PCle. Based on APPC 1220T model, APPC 1221T has two RS-232/422/485 COM ports with isolation to fit industrial applications plus two additional RS-232 COM ports. In addition, one GPIO port for 4 input/output is available for digital control. There is also an optional CAN bus interface for communication with CAN bus device.

## Specifications

### Panel

- LCD Size: 12.1", 4:3
- Resolution: SVGA 800x600
- Luminance: 450cd/m2
- Contrast ratio: 700
- LCD color: 262K
- Viewing Angle: 65(U), 75(D), 80(L), 80(R)
- Backlight: LED

### Touch screen

- Fully flat 5-wire resistive
- Touch light transmission: 80%
- Touch interface: USB

### System

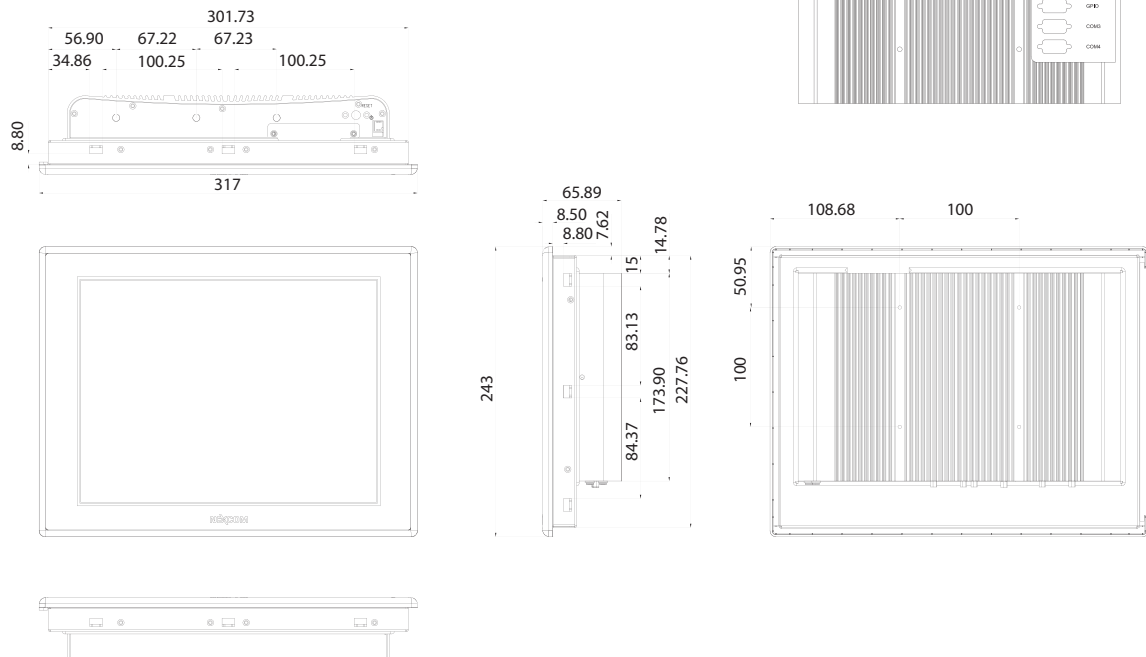
- CPU: Intel® Atom™ D525, 1.8GHz
- BIOS: AMI BIOS
- System chipset: Intel® ICH8M
- System memory: 1x 204-pin DDR3 SO-DIMM socket, 1G DDR3 (Default), Support up to 2GB DDR3 800, Non-ECC and Un-buffered
- SSD: one external locked CF socket by IDE support Type I/II compact Flash card

- Hard drive bay: optional 2.5" SATA HDD or 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
- NEXCOM Xcare platform system management supported

### Rear I/O

- CAN BUS (for APPC1221T Optional)
- GPIO (for APPC1221T only): 4 x digital in / 4 x digital out
- COM #1: RS232/422/485 (APPC 1221T w/ 2.5kv isolated)
- COM #2: RS232/422/485 (APPC 1221T w/ 2.5kv isolated)
- COM #3 & COM #4 (for APPC 1221T only): 2x RS232
- 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

## Dimension Drawing



### Audio

- AC97 codec: Realtek ALC888
- 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
- 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)
  - 0.5Grms @sine, 5~500Hz, 1hr/axis (HDD 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 50°C
- Storage temperature: -20°C to 75°C
- Operating humidity: 10%~90% relative humidity, non-condensing
- Dimension: 317 x 243 x 65mm
- Weight: 3.8 Kg

### Certifications

- CE approval
- FCC Class A

## Ordering Information

### Barebone

- **APPC1220T Ver. B (P/N: 10IA1220T02X0)**  
12.1" TFT LED Panel PC with Intel® Atom™ D525 1.8 GHz, touch screen, 1GB DDR3, COM#1/ #2
- **APPC1221T Ver. B (P/N: 10IA1221T01X0)**  
12.1" TFT LED Panel PC with Intel® Atom™ D525 1.8 GHz, touch screen, 1GB DDR3, COM#1/ #2 w/ isolation, COM#3/ #4, GPIO (CAN bus Optional)

### Options

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