

# APPC 0820T/0820TC

8" TFT LED SVGA 4:3 Flush Panel PC with  
Intel® Atom™ D525, 1.8GHz, Touch Screen,  
1GB DDR3, 4 x USB, 2 x COM and VGA



APPC 0820TC



APPC 0820T

## Main Features

- ♦ 4:3 8" Fanless Panel Computer
- ♦ Intel® Atom™ D525, Dual Core, Low Consumption CPU
- ♦ Flush Panel by 5-wire Touch Screen
- ♦ Dual GbE/ 2<sup>nd</sup> display-VGA/ Line-in/ Line-out/ MIC-in/ PS2 KB/MS
- ♦ USB x 4/ 1 x mini-PCle sockets/ 1 x CF
- ♦ 1 x RS232/ 1 x RS232/ 422/ 485/ 1 x GPIO
- ♦ DDR3 1GB / 2.5" HDD Bracket
- ♦ Optional Wi-Fi Module / 2.5" HDD
- ♦ IP65 Compliant Front Panel
- ♦ Mounting Support: Panel/ Wall/ Stand/ VESA 100mm x 100mm

## Product Overview

Incorporated a 8" 4:3 touch screen LCD panel with resolutions up to 800x600 (SVGA) and 400 nits brightness, the APPC 0820T and APPC 0820TC are fanless Panel PC based on the Atom™ D525 processor. The industrial motherboard is reengineering to have RAM and mini-PCle aligned in the same side of the board with its Intel® Atom™ D525 CPU. This dedicated motherboard benefits users both in future capability expansion and ease for maintenance. 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.

The ultra slim APPC 0820TC makes it become industrial slimmest model for space-critical applications, such as, access control, small automation machineries, forklift and truck etc. Even though the size is compact, the I/O functionalities- 1x power switch, 1x reset, 1x RS-232, 2x USB, 1x Line-out and 1xVGA- aren't scarified. For more sophisticated automation process, the APPC 0820T provides richer I/O than other 8" Applied Panel PCs. Except for the standard specifications of 1x power switch, 1x reset, 1x RS-232, 2x USB, 1x Line-out, 1x VGA, APPC 0820T adds extra functionalities including two additional USB, 1x Line-in, 1x Mic-in, 1x RS232/422/485, 1x GPIO and PS/2 keyboard and mouse.

## Specifications

### Panel

- ♦ LCD Size: 8", 4:3
- ♦ Resolution: SVGA 800x600
- ♦ Luminance: 400cd/m<sup>2</sup>
- ♦ Contrast ratio: 500
- ♦ LCD color: 262K
- ♦ Viewing angle: 50(U), 70(D), 70(L), 70(R)
- ♦ Backlight: LED
- ♦ Touch screen: 5-wire resistive (flush panel type)
- ♦ Touch light transmission: 82%
- ♦ Touch interface: USB

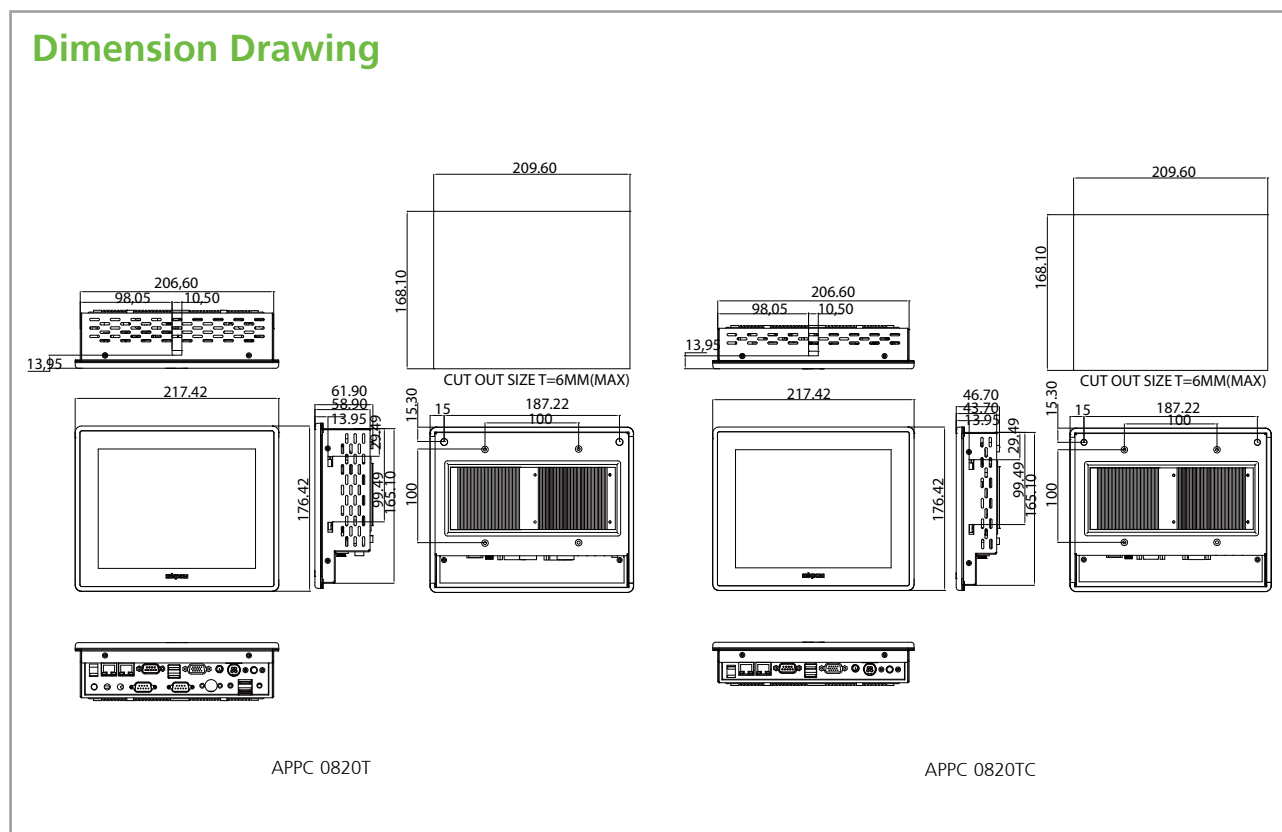
### System

- ♦ 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

### Storage:

- ♦ APPC 0820TC: (Choice of one)
  - SSD: CF socket by IDE support Type I/II compact Flash card (SATA to CF converter board (Optional))
  - Hard drive bay: optional 2.5" SATA HDD
  - SATA DOM (Optional)
- ♦ APPC 0820T: (Choice of one)
  - SSD: CF socket by IDE support Type I/II compact Flash card (Build in SATA to CF converter board)
  - Hard drive bay: optional 2.5" SATA HDD
  - SATA DOM (Optional)
  - HDD and choice of CF 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: 1x Mini-PCle sockets

## Dimension Drawing



### Rear I/O

- APPC 0820TC:
  - COM #1: RS232
  - Ethernet: 2 x RJ45
  - 2<sup>nd</sup> display VGA port: 1 x DB15
  - Audio port: 1 x Line out
  - USB: 2 x USB 2.0
  - Power switch
  - Reset button
- APPC 0820T:
  - GPIO: 4 x digital in / 4 x digital out
  - COM #1: RS232
  - COM #2: RS232/422/485
  - Ethernet: 2 x RJ45
  - 2<sup>nd</sup> 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

### 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 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:
  - APPC0820T - 217.4 x 176.4 x 61.9 mm
  - APPC0820TC - 217.4 x 176.4 x 46.7 mm
- Weight:
  - APPC0820T - 2Kg
  - APPC0820TC - 1.7Kg

### Certifications

- CE approval
- FCC Class A

## Ordering Information

### Barebone

- **APPC 0820T (P/N: 10IA0820T00X0)**  
8" TFT LED Panel PC with Intel® Atom™ D525 1.8 GHz, touch screen, 1GB DDR3 with two COM ports and Audio
- **APPC 0820TC (P/N: 10IA0820T01X0)**  
8" TFT LED Panel PC with Intel® Atom™ D525 1.8 GHz, touch screen, 1GB DDR3 with one COM port
- **Options**  
**12V, 60W AC/DC power adapter w/o power cord**  
**(P/N: 7400060002X00)**