

PPC-105T-CE-RT

PPC-105T with Windows[®] CE 3.0 on 32 MB Flash



Introduction

The 10" low powered and fanless Panel Computer is a ready-to-run, NS Geode-based Windows[®] CE 3.0 software and hardware platform. There is no need to develop on-board device drivers, or build a customized Windows[®] CE OS image using Platform Builder. The only necessary step is to develop users' own Windows[®] CE applications. There are five easy steps to initiate and run a Windows[®] CE application with Advantech solution:

1. Install Microsoft[®] Windows[®] NT 4.0 and Service Pack 6 (or Windows[®] 2000) on development host PC
2. Install Microsoft[®] embedded Visual Tools 3.0 on development host PC
3. Install Advantech Platform SDK on development host PC
4. Remotely connect to target Windows[®] CE Panel PC through Ethernet or serial port
5. Develop, test and debug Windows[®] CE applications

Benefits

1. Recognizable Win32, MFC and Visual Basic programming models
2. Familiar graphic user interface
3. OS image and applications can be stored in a small capacity flash disk, making the whole system more cost-effective and robust.
4. Saves time & money: eliminates 3rd party payment for low-level development and integration
5. Time to market: With this kit, fast prototyping is made possible. Developers can focus on developing higher value-applications.

Software

- Microsoft[®] Windows[®] CE 3.0 English version
- Windows[®] CE Internet Explorer
- Windows[®] CE Telnet sample server
- Windows[®] CE http web server
- Platform SDK for Visual C++ and Visual Basic
- Manual (With step by step application programming guide)
- Sample code (Win32, MFC and Visual Basic applications)
- Test utility programs

Features

- Pre-configured Windows[®] CE 3.0 image on 32 MB CompactFlash[™] Scan Disk
- Platform SDK for developers to write Windows[®] CE applications
- SDK supports popular Visual C++ and Visual Basic programming
- Fanless and low-powered design
- One internal CompactFlash[™] type I socket (True IDE Mode)

Specifications

General Specifications

- **CPU:** NS Geode GX1 300 MHz
- **Memory:** One 144-pin SODIMM SDRAM up to 128 MB (Standard type with 64MB)
- **2nd Cache memory:** On-die 16 KB
- **Chipset:** NS GX5530
- **BIOS:** Award 256 KB Flash BIOS
- **VGA:** NS CX5530
- **VRAM size:** 1.5 - 4 MB
- **SSD:** One CompactFlash[™] Type I socket
- **HDD:** Internal 2.5" drive x 1, external IDE connector x 1
- **FDD:** External FDD connector x 1
- **Watchdog timer:** 62-level, 1 to 62 seconds
- **Expansion slot:** One optional PCI/ISA expansion slot
- **Dimensions (W x H x D):** 342 x 265 x 92.4 mm
- **Weight:** 3.2 kg (7.1 lbs)
- **Windows[®] CE:** Windows[®] CE 3.0 full version (English)

Power Supply

AC model:

- Output rating: 60 Watts
- Input voltage: 100 ~ 240 V_{AC} @ 50/60 Hz, autoranging
- Output voltage: +5 V @ 5 A, +12 V @ 3 A

DC model:

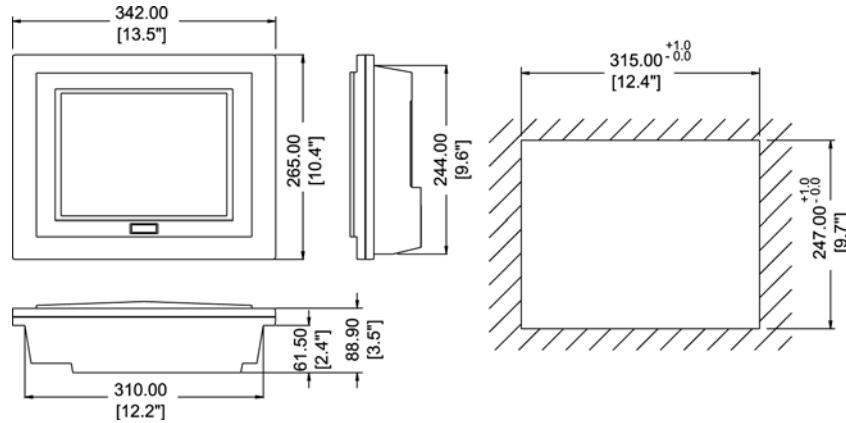
- Output rating: 75 watts
- Input voltage: 18 V_{DC} ~ 36 V_{DC}, typical 24 V_{DC}, 4.2 A max
- Output voltage: +5 V @ 8 A, +12 V @ 2 A

DC model (optional):

- Output rating: 65 watts
- Input voltage: 9.5 V_{DC} ~ 18 V_{DC}, typical 12 V_{DC}, 6.8 A max
- Output voltage: +5 V @ 7 A, +12 V @ 2 A



Dimensions



Units:mm

LCD Display

- **Size (diagonal):** 10" SVGA TFT LCD
- **Resolution:** 800 x 600
- **Max. colors:** 256 K
- **Pixel pitch:** 0.25 x 0.25 mm
- **Luminance (cd/m2):** 170
- **Viewing angle:** 100°
- **VR controls:** Yes
- **Simultaneous mode:** Yes
- **LCD lifetime:** 50,000 hrs.
- **Backlight MBTF:** 20,000 hrs.

Touch Screen

- **Type:** Analog resistive, continuous resolution
- **Light transmission:** 75%
- **Controller:** RS-232 interface (COM 4)
- **Software driver:** Supports Windows® CE
- **Lifetime:** 30 million touches

Environmental Specifications

- **Operating temperature:** 0 ~ 40° C (32 ~ 104° F)
- **Relative humidity:** 10 ~ 95% @ 40° C (non-condensing)
- **Shock (operating):** 10 G peak acceleration
- **Vibration:** 1G
- **EMC:** CE, FCC Class B
- **Safety:** UL, CE
- **Front Panel protection:** IP65/NEMA4 compliant

Complete I/O ports

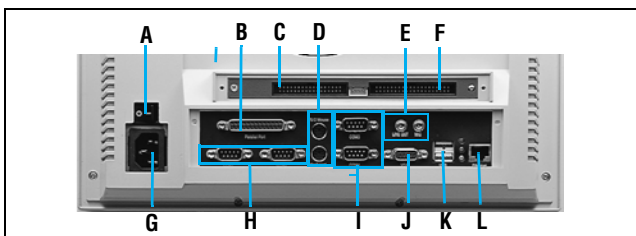
- **COM port:** RS-232 x 2, RS-232/422/485 x 1
- **USB:** 2
- **Parallel port:** 1
- **External IDE:** External IDE connector x 1
- **Keyboard/Mouse:** 1
- **Audio:** Line-out, Mic-in
- **Network (LAN):** 10/100Base-T Ethernet interface

Ordering Information

- PPC-105T-CE-RT:** Panel Computer with 10" TFT SVGA LCD display, resistive touchscreen, GX1 300 MHz CPU, 64 MB SODIMM on-board, 32 MB CompactFlash™ Card and Windows® CE 3.0
- PPC-105DC-CE-RT:** PPC-105T-CE-RT with DC 24 V power supply (12 V_{DC} is optional)

Optional Items

- PPC-100 STAND:** Stand kit for the PPC-100/102/103/105 series
- PPC-100 SWINARM:** Swing arm kit for the PPC-100/102/103/105 series
- PPC-100 WALL-MT:** Wall mount kit for the PPC-100/102/103/105 series
- PPC-EXP-105:** PCI/ISA expansion kit for PPC-105



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|----------------------------|--------------|
| A. Power switch | G. AC inlet |
| B. Parallel port | H. COM ports |
| C. FDD Port | I. COM Ports |
| D. PS/2 mouse and keyboard | J. VGA port |
| E. MIC-in/Line-out | K. USB ports |
| F. IDE port | L. Ethernet |