# PPC-174T

## Panel PC with Intel® Pentium® 4 Processor and 17" Color TFT LCD

## Features

- 17" TFT SXGA LCD
- Intel® Pentium® 4 CPU up to 3.06 GHz
- System memory up to 2 GB DDR SDRAM
- Built-in FDD/CD-ROM drive/speakers
- Built-in PCMCIA Type II x 2
- Two PCI expansion slots
- 10/100Base-T Ethernet (Gigabit optional)
- Rugged Aluminum die-cast housing with removable plastic front bezel
- Removable 3.5" HDD bay
- Optional 6-in-1 card reader (MS, SD, SM,MC and CF type I/II sockets)
- Resistive, capacitive, SAW and infrared touchscreens are available

## Introduction

PPC-174T is a high performance and highly expandable panel PC. Equipped with a 17" Color TFT LCD, it features high performance, multimedia devices, connectors, and 2 PCI sockets for high expansion capacity. Because of its multifunctional design, the PPC-174T meets demands from multimedia applications and interactive kiosks that require big displays and more powerful computing performance.

## Specifications

- **CPU** — Supports Socket 478 based Pentium 4 CPU up to 3.06 GHz
- **Disk Drive Housing** — Removable 3.5" HDD bay
- **Dimensions (W x H x D)** — 446 x 382 x 127 mm (17.56" x 15.04" x 5")
- **Weight** — 10 kg (22 lbs)
- **Front Panel Protection** — IP 65/NEMA 4 compliant (not for SAW model)
- **HDD** — IDE HDD interface (3.5" HDD bay)
- **CD-ROM Drive (Default)** — Compact 24X or above
- **DVD-ROM Drive (optional)** — Optional 6X or above
- **Combo drive (Optional)** — Optional DVD/CD-RW 8D/24W/24E/24R or above
- **Memory** — Supports up to 2 GB DDR 333 SDRAM (184-pin)
- **FDD** — Supports 720 KB / 1.44 MB FDD
- **Network (LAN)** — 10/100Base-T Ethernet interface (Gigabit optional)
- **I/O ports** —
  - 3 serial ports: RS-232 x 2, RS-232/422/485 x 1
  - Parallel port, USB 2.0 port x 4
  - PCMCIA Type II x 2
  - 6-in-1 cardreader: supports CompactFlash, Micro Drive, Smart Media, Secure Digital, Memory Stick & Multimedia Card
  - PS/2 mouse and keyboard interface
  - Mic-in, Line-in, Line-out, and game port
  - S-Video port
- **Bus Expansion** — Two PCI expansion slots, one Mini PCI card

### Environmental Specifications

- **Operating Temperature** — 0 ~ 45° C (32 ~ 113° F)
- **Relative Humidity** — 10 ~ 95% @ 40° C, non-condensing
- **Shock** — 10 G peak acceleration (11 msec. duration)
- **EMC** — BSMI, VCCI, CE, FCC Class B, CCC
- **Safety** — CB, CE, UL

### Touchscreen (Optional)

| Types | Analog Resistive | Capacitive | Surface Acoustic Wave | Infrared |
|---|---|---|---|---|
| Resolution | Continuous | 1024 x 1024 | 4096 x 4096 | 4096 x 4096 |
| Light Transmission | 75% | 91.5% | 91% | 91% |
| Controller | RS-232 interface | | | |
| Power Consumption | +5 V @ 200 mA | +5 V @ 100 mA | +5 V @ 150 mA | +5 V @ 150 mA |
| Software Driver | Supports both DOS and Windows | | | |

### LCD Display

- **Display Type** — Color TFT LCD
- **Size (Diagonal)** — 17"
- **Max. Resolution** — 1280 x 1024
- **Max. Colors or Grayscales** — 262 k
- **Pixel Pitch (mm)** — 0.264 x 0.264
- **Luminance (cd/m2)** — 260
- **Contrast Ratio** — 450:1
- **Viewing Angle** — 70° (left), 70° (right), 70° (up), 70° (down)
- **Operating Temperature** — 0 ~ 50° C
- **VR Controls** — Brightness
- **Simultaneous Mode** — Yes
- **LCD MTBF** — 50,000 hrs.

### Power Supply

- **Output Rating** — 180 W (max.)
- **Input Voltage** — 100 ~ 240 $V_{AC}$ @ 50 ~ 60Hz
- **Output Voltage** — +3.3 V @ 16.8 A, +5 V @ 12 A, +12 V @ 10 A, -12 V @ 0.8 A, +5 VSB @ 2 A

# Ordering Information

- **PPC-174T**        **(Bare BOM: PPC-174T-BAREE)**
  Panel PC with 17" TFT LCD display
  (resolution: 1280 x 1024)
- **PPC-174T-RT**        **(Bare BOM: PPC-174T-BARE-TE)**
  PPC-174T with resistive touchscreen
- **PPC-174T-CT**        **(Bare BOM: PPC-174T-BARE-CE)**
  PPC-174T with capacitive touchscreen
- **PPC-174T-ST**        **(Bare BOM: PPC-174T-BARE-SE)**
  PPC-174T with SAW touchscreen
- **PPC-174 Stand**        Stand kit for PPC-174T
- **PPC-174 SWINARM**        VESA standard ARM for PPC-174T
- **PPC-174 WL-MT**        Wall mount kit for PPC-174T
- **PPC-174 RACK-MT**        19" Rack Mouting kit for PPC-174(9U)

* Intel Pentium 4 CPU, DDR SDRAM and 3.5" HDD are available as optional items.
* FDD, CD-ROM and PCMCIA are removable as OEM items
* Infrared touchscreen with Sunlight readable panel could be ordered via OEM process,and both of items can be ordered separately

# Feature Details

### Protection

The PPC-174T is robust enough to withstand harsh environments on factory floors and in an external environment. The die-cast housing also acts as a heat sink to prevent the system from overheating.

### Networking

Three serial ports and a 10/100Base-T Ethernet port (Gigabit optional) give the PPC-174T advanced networking capabilities and provide the best solution for versatile applications.

### Expansion

To extend its functionality, the PPC-174T is designed with two expansion slots for PCI cards, one Mini PCI slot, four USB 2.0 (Universal Serial Bus) ports, and one S-Video port, a 6-in-1 cardreader interface, and one PCMCIA card bus (Type II x 2). With these expansion capabilities, the PPC-174T not only functions as a HMI, but also as a computing center around which to build your application.
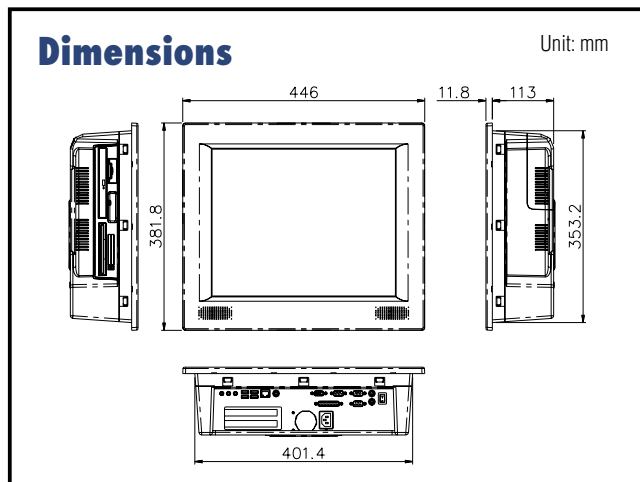
### Removable 3.5" HDD Bay

A 3.5" HDD is more reliable and cost-effective than a 2.5" HDD. The PPC-174T's 3.5" removable HDD drive bay provides great performace, and can be easily maintained.
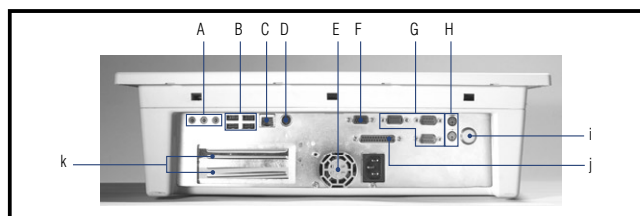
### Touchscreen Options

Customers can choose from three optional types of standardized touchscreens: resistive, capacitive and SAW (Surface Acoustic Wave). These options make the PPC-174T a more user-friendly interface for different environments.

# Dimensions

Unit: mm



446    11.8    113
381.8    353.2
401.4

# Fully Integrated I/O



A. Line-in/Line-out/Mic-in
B. USB 2.0 x 4
C. 10/100 Ethernet (Gigabit optional)
D. S-Video
E. ATX power supply
F. VGA port
G. COM port x 3
H. PS/2 mouse & keyboard
i. Power switch
j. Parallel port
k. PCI slot x 2



Removable 3.5" HDD bay