PPC-A84T/A120T

Introduction

The modularized Panel PC series is a new addition to the Advantech Panel PC product family featuring anonboard low-power and fanless CPU, plug-in accessory modules, and a rugged die-cast housing. The PPC-A84T-R51 is a revision from the previous PPC-A84T but retains the same functionality and features the PPC-A84T-R50 with a higher performance CPU, the Geode GX1 300 MHz. The new PPC-A120T, a 12.1" panel PC with same structure of PPC-A84T is also introduced to meet customer demand for a large size Panel PC with fanless design. Both products are specially designed for HMI applications, such as factory, machinery automation, transportation, and health care. The PPC-A84T and PPC-A120T are designed with advanced breakthrough concepts. When installed in an open space, no fan is required.

Aluminum Die-cast Housing

The housing is completely sealed to system in harsh environments. The die-cast housing also acts as a heat sink to prevent the system from overheating. The front panel is NEMA 4/IP 65 compliant.

No Ventilation Holes

A heat pipe transmitts heat to the housing, so the system's MTBF has been extended. The enclosure is completely sealed, there are no ventilation holes, protecting the system from dust.

Plug-in Accessory Modules

The power supply, HDD and PCMCIA modules of the PPC-A84T/A120T can be easily removable for maintenance or exchange. This modular design allows for easier and quicker replacement of accessories.
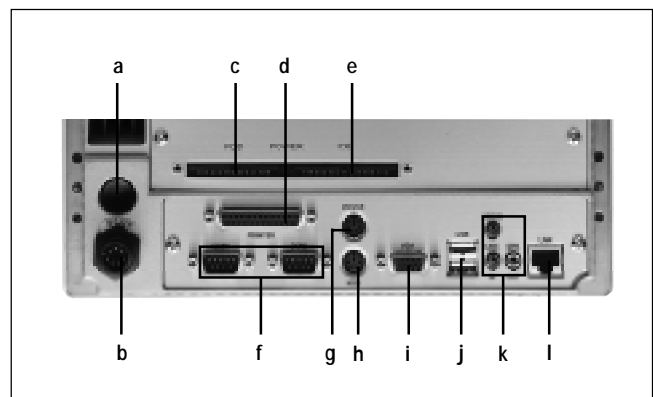
Onboard Health Monitoring

The onboard health monitoring function provides CPU voltage and system temperature self-detection to prevent the system from overheating.
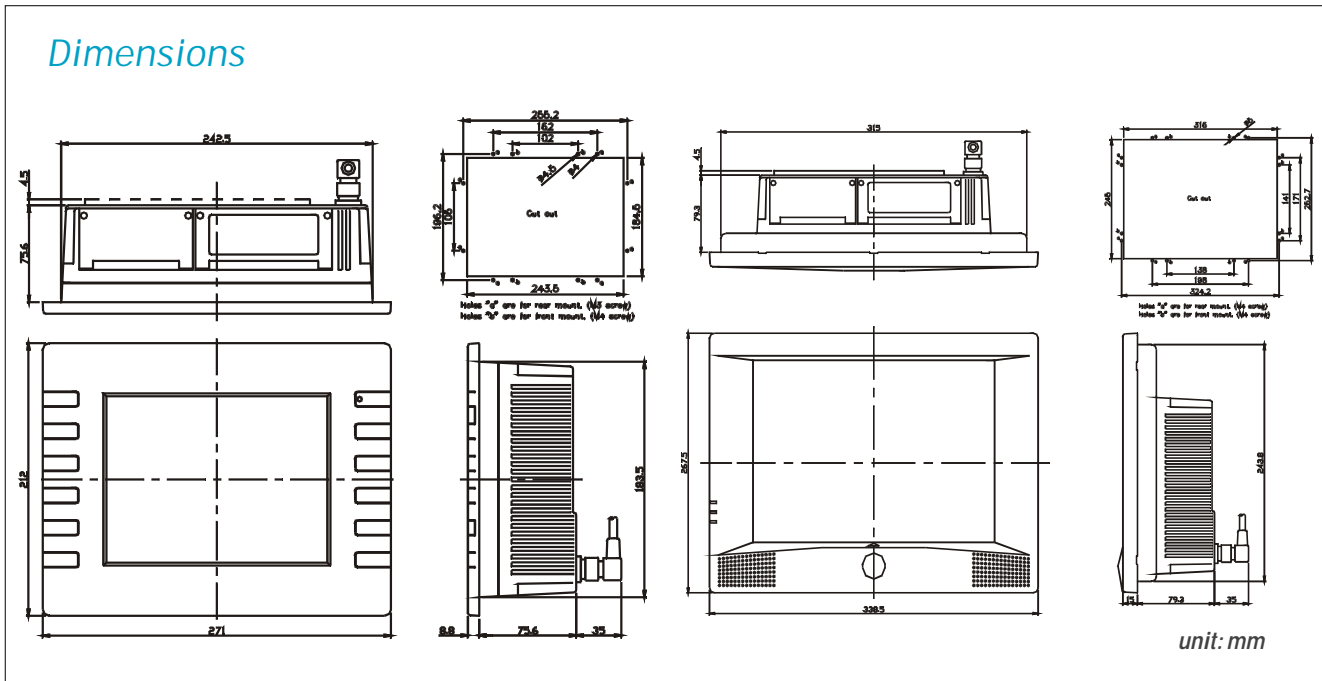
Specifications

- **Construction:** Aluminum die-cast housing with optional PCI/ISA extension cover
- **CPU:** NS Geode GX1 300 MHz processor
- **Memory:** Supports up to 128 MB, 1 SODIMM socket
- **HDD:** One plug-in module for 2.5" type HDD
- **SSD:** Supports 1 CompactFlash™ socket
- **FDD:** Supports 1 external FDD connector
- **Network:** 10/100Base-T Ethernet interface (auto-sensing)
- **Audio:** Mic-in/Line-in/Speaker-out jacks
- **Watchdog timer:** 62 level, IRQ or reset interrupt
- **Bus expansion:** Supports 1 PCI/ISA slot (optional)
- **Dimensions (W x H x D):**
  271 x 212 x 75.6 mm (10.67" x 8.35" x 2.98") /
  336 x 265 x 100 mm (13.23" x 10.43" x 3.94")
- **Weight:** 3.4 kg (7.5 lbs)/4.2 kg (9.3 lbs)

Fully Integrated I/O

a. Power switch   g. Mouse

b. DC inlet   h. Keyboard

c. FDD port   i. VGA port

d. Parallel port   j. USB

e. IDE port   k. Mic-in/Line-in/Speaker-out

f. COM ports   l. Ethernet port

AD\ANTECH

Dimensions

unit: mm

LCD Display

Model	PPC-A84T	PPC-A120T
LCD type	TFT color LCD	TFT color LCD
Size (Diagonal)	8.4"	12.1"
Max. resolution	800 x 600	800 x 600
Max. colors	256 K	256 K
Pixel pitch (mm)	0.21 x 0.21	0.31 x 0.31
Luminance (cd/m²)	120	200
Viewing angle	60°	100°
Temperature	0 ~ 50°	0 ~ 50°
Simultaneous mode	Yes	Yes
LCD MTBF	50,000 hrs	50,000 hrs
Backlight MTBF	10,000 hrs	25,000 hrs

Power Supply

- **Input rating:** 18~28 V_{DC}, typical 24 V_{DC}
- **Output voltage:** +5 V @ 8 A, +12 V @ 1 A, - 12 V @ 0.3 A
- **EMI:** Meets FCC/CE Class B

Touchscreen

- **Type:** Resistive
- **Resolution:** 1024 x 1024
- **Light transmission:** 75%
- **Controller:** PS/2 interface/RS232 Interface
- **Power consumption:** +5 V @ 200 mA

- **Software driver:** Supports DOS, Windows 95/98/NT 4.0
- **Lifetime:** More than 3 million/30 million touches

Environmental Specifications

- **Operating temperature:** 0 to 45° C (32 to 113° F)
- **Relative humidity:** 10 to 95% @ 40° C, non-condensing
- **Shock:** 10 G peak acceleration (11 msec duration)
- **Certification:** CE, FCC Class B

Ordering Information

- ❏ PPC-A84T-051 (Bare BOM: PPC-A84T-051-X)
  Panel PC with 8.4" TFT LCD display (resolution: 800 x 600), aluminum die-cast housing, and DC power supply

- ❏ PPC-A84T-R51 (Bare BOM: PPC-A84T-R51-X)
  PPC-A84T-051 with resistive touchscreen

- ❏ PPC-A120T-051 (Bare BOM: PPC-A120T-051-X)
  Panel PC with 12.1" TFT LCD display (resolution: 800 x 600), aluminum die-cast housing, and DC power supply

- ❏ PPC-A120T-R51 (Bare BOM: PPC-A120T-R51-X)
  PPC-A120T-051 with resistive touchscreen

* DRAM, 2.5" HDD, CompactFlash™ memory, 24V_{DC} power adapter and PCMCIA adapter are available as optional items.

Note: All specifications are subject to change without notice.