PPC-153M/123M

Medical Certified Pentium® III/Celeron™ based Panel PC with 15"/12.1" Color TFT LCD & Optional Touchscreen

Features

- Medical certified Panel PC
- UL60601-1/EN60601-1, CE & FCC Class B certified

Introduction

The PPC-153M/123M is a UL2601/EN60601 certified Pentium® III Socket 370 based Panel PC with 15.0"/12.1" TFT color LCD (resolution up to 1024 x 768/ 800 x 600). It features multimedia devices, various connectors, and can be installed in virtually any application. In addition, its user-friendly interface serves as an excellent host for information appliances.

Specifications

- **CPU** — Supports Socket 370 based Pentium® III CPU, up to 1.26 GHz or Celeron™ CPU up to 1GHz
- **Disk Drive Housing** — Room for one 2.5" HDD
- **Dimensions** — 420 x 323 x 106 mm (16.54" x 12.72" x 4.17")/ 375 x 285.5 x 104.4 mm (14.76" x 11.24" X 4.11")
- **Weight** — 6.5 kg (14.3 lbs)/5.2kg (11.5 lbs)
- **Front Panel Protection** — IP 65/NEMA 4 compliant (not for SAW model)
- **HDD** — IDE HDD interface (2.5" HDD bay)
- **CD-ROM Drive** — Compact 24X or above
- **DVD-ROM Drive** — Optional 6X or above
- **CD-RW Drive** — Optional 8X/4X/24X or above
- **Memory** — Supports up to 1 GB SDRAM (168-pin)
- **FDD** — Supports 720 KB / 1.44 MB FDD
- **Network (LAN)** — 10/100Base-T Ethernet interface
- **I/O Ports** —
  - 4 serial ports: RS-232 x 3, RS-232/422/485 x 1
  - 1 parallel port, 2 USB ports
  - PCMCIA Type II x 2
  - 1 PS/2 mouse and keyboard interface
  - Mic-in, Line-in, Line-out, and game port
- **Bus Expansion** — One expansion slot for half-size PCI/ISA card

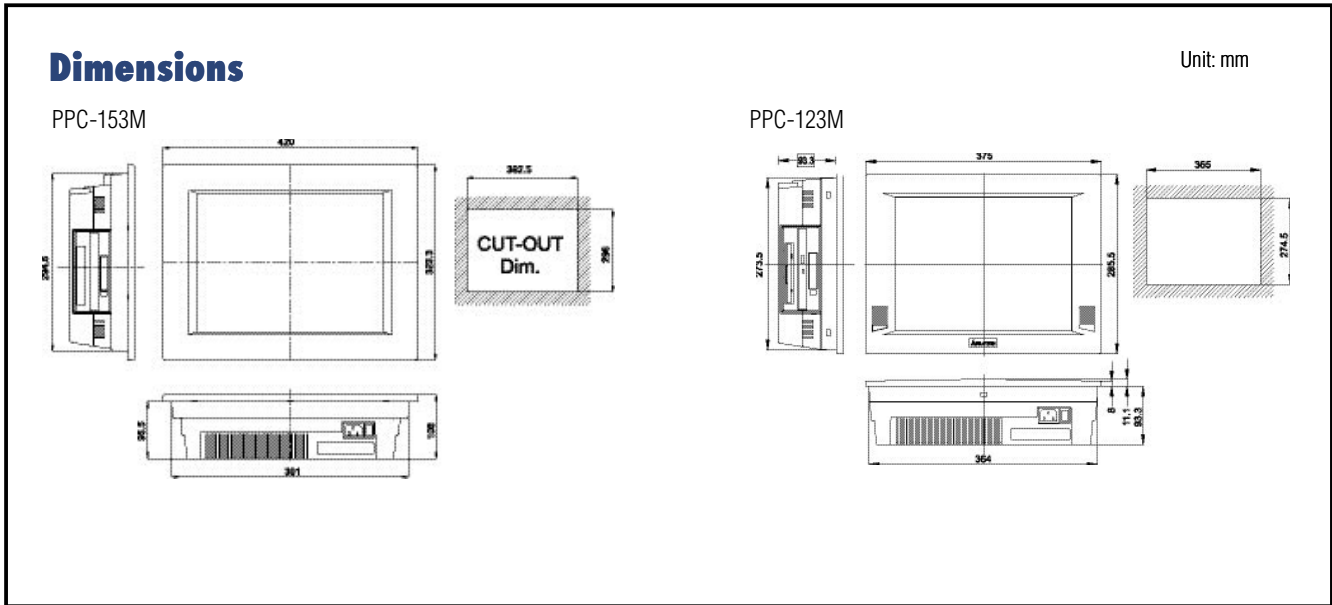| Touchscreen Types	Analog Resistive	Capacitive	Surface Acoustic Wave
Resolution	Continuous	1024 x 1024	4096 x 4096
Light Transmission	75%	85%	91%
Controller	RS-232 interface (uses COM4)	RS-232 interface (uses COM4)	Rs-232 interface (uses COM4)
Power Consumption	+5 V @ 200 mA	+5 V @ 100 mA	+5 V @ 150 mA
Software Driver	Supports both DOS and Windows		
Durability (Lifetime touches)	30 million	20 million	50 million

Power Supply

- **Output Rating** — 80 W (max.)
- **Input Voltage** — 100 ~ 250 VAC, auto-switching @ 50 ~ 60 Hz
- **Output Voltage** — +5 V @ 12 A, +12 V @ 1 A
- **MTBF** — 00,000 hrs
- **Safety** — Meets UL2601-1, EN60601-1, CSA22.2 No. 601-1, TUV EN60601-1
- **EMI/EMS** — Meets FCC/CE Class B

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** — VCCI/BSM/CE/FCC Class B
- **Safety** — Meets UL/CSA/CE

Model	PPC-153M	PPC-123M
Display Type	TFT color LCD	TFT color LCD
Size (Diagonal)	15"	12.1"
Max. Resolution	1024 x 768	800 x 600
Max. Colors or Grayscales	256K	256K
Pixel Pitch (mm)	0.297 x 0.297	0.31 x 0.31
Luminance (cd/m²)	250	300
Viewing Angle	120°	90°
Temperature	0 ~ 50°	0 ~ 50°
VR Controls	Brightness	Brightness
Simultaneous Mode	Yes	Yes
LCD MTBF	50,000 hrs.	50,000 hrs.
Backlight MTBF	25,000 hrs.	25,000 hrs.

Dimensions

Unit: mm

PPC-153M

PPC-123M

Ordering Information

- **PPC-153M/123M (Bare BOM: PPC-153M/123M-CBAR)**
  Panel PC with 15"/12.1" TFT LCD display
  (resolution: 1024 x 768/800 x 600)
- **PPC-153M/123M-RT (Bare BOM: PPC-153M/123M-CBAR-T)**
  PPC-153M/123M with resistive touchscreen
- **PPC-153M/123M-CT (Bare BOM: PPC-153M/123M-CBAR-C)**
  PPC-153M/123M with Capacitive touchscreen
- **PPC-153M-ST (Bare BOM: PPC-153M-CBAR-S)**
  PPC-153M with SAW touchscreen

- **PPC-120 STAND**   Stand kit for PPC-153/150 and PPC-123 / 120 series
- **PPC-150 SWINARM**   Swing arm kit for PPC-153/150 series
- **PPC-120 WL-MT**   Wallmount kit for PPC-153/150 and PPC-123/120 series
- **PPC-ARM-A02**   VESA standard ARM for PPC-123 / 153 series

* Intel Pentium® III and Celeron™ CPU, SDRAM and 2.5" HDD are optional.

Feature Details

UL2601/EN60601 Certified

Electronic products for medical use must be designed for safety, minimum interaction with other electronic devises, and for military-grade reliability. More specifically, they must conform to UL60601-1 in the United States and EN60601 (including both EN60601-1-1, EN60601-1-2) in Europe. The goal of these standards is to ensure that all medical electronic products provide a high level of safety for operators and patients.

The PPC-153M/123M is medical-certified panel computer with UL60601-1/EN60601 approval, and the low leakage current power supply enables the series to serve as an ideal and secure point-of-care solution for the patients and hospital practitioners.

Protection

To meet the requirements of a public environment, the PPC-153M/123M complies with the IP 65/NEMA 4 protection standard. The watchdog timer and power management features make the system even more secure and stable. The on-board hardware monitoring feature provides automatic protection function, which prevents the CPU from being overheated.

Networking

Four serial ports and a 10/100 Base-T Ethernet controller give the PPC-153M/123M advanced networking capabilities and provide the best solution for versatile applications.

Expansion

To extend functionality, the PPC-153M/123M is designed with one expansion slot for PCI/ISA cards, two USB (Universal Serial Bus) ports, and one PCMCIA card bus (Type II x 2). With these expansion capabilities, the PPC-153M/123M not only functions as an HMI, but also as a computing center around which to build your application.

Touchscreen Options

The customer can choose from of three types of touchscreen options: resistive, capacitive and SAW. All three kinds of touchscreens are standard; customers can easily order according to their needs. Multiple touchscreen options make the PPC-153M/123M an adaptable, user-friendly interface for integration systems in different environments.