# Technical Data

**PI-11006 Instrument Chassis**

## PI-11006   Instrument Chassis

**Features:**
- SBC plus 5 Instrument Slots
- Holds 6U Cards
- 330 Watt Power Supply
- Supports 3.3 V or 5.1 V cPCI Boards
- Supports PI Instrument Cards
- Pentium Class Processor up to 333 MHz
- Up to 512 Mbytes EDO or ECC DRAM
- Up to 144 Mbytes of on-board flash memory
- Rack-mountable

**Applications:**
- Chassis for Small Test System
- Chassis for Single Instrument Type Support
- Chassis for PI Instrument Cards

**Description:**

The PI-11006 Instrument Chassis was designed to accommodate the power and noise requirements of some of Pulse Instruments analog instrument cards. These instrument cards, such as the PI-41400, PI-41701 and others supply signal outputs that require more current from the -12V supply than available in a standard chassis. Therefore this chassis has a larger -12V power supply that provides 5.0 Amps.

The standard CompactPCI®chassis is typically built for instrumentation applications where electrical noise is not a serious consideration. With our test equipment electrical noise is an important consideration in the overall performance of the equipment. This chassis has been modified to minimize the electrical noise that is injected into the instruments' analog circuitry and therefore mini-mizes the effect on the output performance.

The instrument has a 6-slot cPCI backplane that is compliant with PICMG 2.1 R1.0 specification. One slot is used for the single-board-computer with the remaining 5 slots used for instrument cards. These cards can be of any combination provided by Pulse Instruments or other vendors of CompactPCI® instrument cards.

The SBC is a Pentium Class processor utilizing the PC industry standard DIMM socket for DRAM. The unit comes with 128Mbytes of Extended Data Out (EDO) DRAM for high performance. As an option the unit can be supplied with Error Correcting (ECC) DRAM for improved reliability and data integrity. The memory total capacity is 512Mbytes. The SBC comes with up to 4Mbits of on board flash memory for system BIOS. Optionally the flash memory can be upgraded to 144 Mbytes. The processor contains internal Level 1 cache memory with 512Kbytes of Level 2 cache memory provided on-board the unit.

The SBC supports the Socket 7 Specification for Pentium class processors up to 333 MHz, including MMX technology. The processor provides the standard on-board peripherals such as timers, real-time clock, and one serial (16550) port. In addition, it also provides two Enhanced IDE controllers, mouse and keyboard ports, a floppy controller, one Universal Serial Bus (USB) port and a 10/100MB Ethernet port.

System power-on reset and Non Maskable Interrupt reset switches are accessible from the front panel.

LED's are provided on the front panel for EIDE activities, Ethernet negotiation and speed status and system power status.

The SBC supports Windows NT.

**Specifications:**

**PI-11006 Chassis**

- Six slots, one for SBC and five instrument slots
- Power Supply, 330 Watts
  - 5 Volts @ 30A
  - 3.3 Volts @ 14A
  - 12 Volts @ 5A
  - -12 Volts @ 5A
- IEEE1101.10 Compliant
- RFI/EMI Shielded, designed to meet FCC Part 15 Class A
- UL/CSA/CE Qualified
- Physical Size: 5.25" x 17.375" x 11.625", (133mm x 441mm x 295mm)

**Single Board Computer**

- PICMG (r) 2.1 Hot Swap Specification compatible
- Pentium socket 7 compatible processors up to 366MHz with MMX technology
- Up to 512Mbytes EDO or ECC DRAM
- 512Kbytes L2 Cache
- VGA controller with 2MB VRAM
- Interrupt and Reset buttons
- One Universal Serial Bus (USB)
- One (16550) serial port
- PS/2 mouse port
- PS/2 keyboard port
- On-board 10/100BASE-T Fast Ethernet port
- Optional rear I/O transition adapter interface from J3
- Windows NT, pre-installed

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