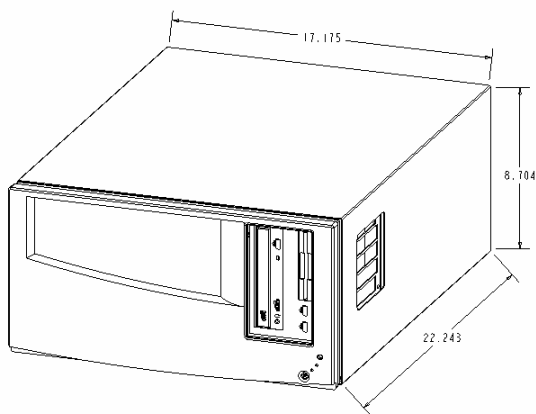


# Model 4500-MTS Mainframe Specifications

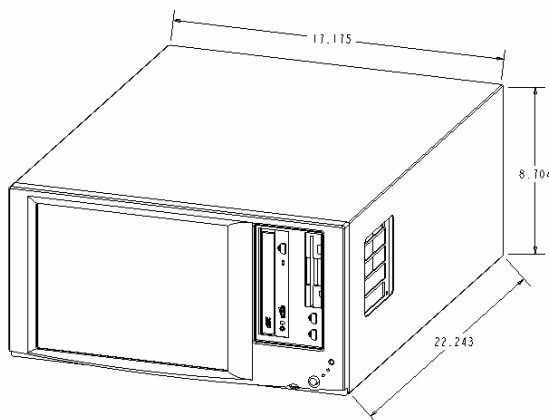
## DESCRIPTION

The 4500-MTS is a fully integrated, instrument grade industrial computer with the following features:

- Total of 10 PCI slots, 9 PCI instrument slots available to user. 1 ISA instrument slot. 1 PICMG CPU slot.
- Sideband/trigger bus for cross-card measurement synchronization. Dedicated connector on each instrument slot.
- High-power, low-noise instrument grade power supply. Dedicated connector on each instrument slot.
- Embedded PC with Windows operating system.
- SVGA interface for driving an external monitor.
- 10/100 Base-T LAN interface.
- USB interface.
- RS-232 interface.
- Printer interface.
- Hard disk drive.
- CD-RW disk drive.
- Floppy disk drive.
- Steel chassis with enhanced cooling, painted cover, and plastic front bezel.
- Optional integrated Flat Panel Display.
- Full size keyboard with integrated pointing device.



4500-MTS/C



4500-MTS/F

## ACCESSORIES:

The following instruments were specifically designed for use with the 4500-MTS mainframe:

- 4511-QIVC – 1A, Quad IV instrument card.
- 4510-QIVC – 500mA, Quad IV instrument card.

The following is a current list of Keithley products that have been validated with the 4500-MTS:

- KPCI-PIO32IOA and KPCI-PDISO8A (16I/16O and 8I/8O Isolated Digital IO)
- KPCI-3130 and KPCI-3132 (8 and 2 channel Analog Output)
- KPCI-3110 (1.25MHz Multi function AIO PCI Card)
- KPCI-3116 (250kHz Low Gain AIO PCI Card)
- KPCI-3108 and KPCI-3107 (100kHz Multi function AIO (3108) AI (3107))
- KPCI-488.2 GPBI PCI Card

Other Keithley PCI and ISA cards could be used with the 4500-MTS but have not been verified at the time of this printing.

# Model 4500-MTS Mainframe Specifications

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## SYSTEM BACKPLANE:

### PCI

**Slots:** Ten total. Nine slots are available for PCI instrumentation. One slot reserved.

**Compliance:** PCI 2.1 – 2.3 (Determined by embedded PC).

### ISA

**Slots:** 1, 16 bit slot.

**Compliance:** PICMG 2.0

### PCI/ISA

**Slots:** 1

**Compliance:** PICMG 2.0

### SIDEBAND/TRIGGER BUS

Reserved for use by 45XX instrument cards.

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## SYSTEM POWER SUPPLIES:

The 4500-MTS mainframe utilizes 2 power supplies. The ATX power supply provides power to the computer components (e.g. embedded PC, disk drives, etc...) and PCI bus. The Analog power supply provides 48V power to 45XX instrument card output stages.

**ATX Power Supply:** 70Watts Max.

Output Voltage (Max Current): +3.3V (14 Amps), +5V (20 Amps), -5V (0.3 Amps), +12V (6 Amps), -12V (0.8 Amps).

**Analog Power Supply:** +48V (16 Amps max).

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## EMBEDDED SINGLE BOARD COMPUTER (SBC):

### FEATURES:

**Processor:** Intel Pentium 4, 2 GHz.

**Chipset:** Intel 845.

**Memory:** Up to 2 GB, 200/266 MHz DDR SDRAM on two 184-pin DIMM sockets.

**Video:** ATI Mobility M6 graphics controller, 16 Mbytes 200 MHz DDR SDRAM display cache. Flat panel LVDS support and simultaneous SVGA support.

**LAN:** 10/100 Base-T. RJ-45 connector on SBC retaining bracket.

**USB:** One port on SBC retaining bracket. Two ports on 4500-MTS front panel.

**Serial:** One port, 9 pin, COM1.

**Parallel:** One port, 25 pin.

**IDE:** Two EIDE ports with ULTRA DMA 33/66/100 support.

**Floppy:** One port.

**Keyboard/Mouse:** One 9-pin DIN connector on SBC retaining bracket. Y-cable provided.

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## DISK DRIVES:

**Hard drive:** Interface - EIDE; Capacity - 40 GB.

**Floppy disk:** Size - 3.5"; Capacity - 1.44 MB.

**CD-RW:** Interface - ATAPI, EIDE.

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## CHASSIS:

**Material:** Stainless steel inner chassis and rear panel. Painted steel cover.

**Fan:** High reliability cooling fan.

# Model 4500-MTS Mainframe Specifications

## GENERAL SPECIFICATIONS

### POWER SUPPLY:

**Power Per Slot Max:** 96W for 48V; 8.75W for ATX.

**Mains:** Push Button ON/OFF switch/fuse/power module combo.

### TEMPERATURE:

**Operating:** 0° to +40°C (with no accessory cards)

**Storage:** -15° to 60°C

### HUMIDITY:

**Operating:** 5% to 70% RH, non-condensing

**ALTITUDE:** Maximum 2000m above sea level. For Indoor Use Only.

**POWER REQUIREMENTS:** 100-240VAC, 50/60Hz.

**INPUT POWER RATING:** 1kVA max.

**WARM UP TIME:** 1 hour

### REGULATORY COMPLIANCE:

**Safety:** Conforms to European Union Directive 73/23/EEC, EN61010-1, CAT I.

**EMC:** Conforms to European Union Directive 89/336/EEC, EN61326-1.

**DIMENSIONS:** 22.3cm high x 43.6cm wide x 56.5cm deep (8.75in. x 2.17in. x 22.25in.).

**WEIGHT (approx.):** 26.3kg (58lbs) for base system (excluding multi-channel cards, cables, keyboard, etc).