



# Tech Info Library

## Power Macintosh 5400/120: Technical Specifications (7/96)

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Security: Everyone

Power Macintosh 5400/120: Technical Specifications (7/96)

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TOPIC -----

This article contains the technical specifications for the Power Macintosh 5400 series computers.

DISCUSSION -----

### Microprocessor

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- PowerPC 603e processor
- 120 MHz processor clock
- 32K internal cache
- Built-in floating point unit (FPU)
- 40 MHz system bus
- 64-bit memory bus
- 32-bit PCI bus
- Optional High Performance Module (256K level 2 cache)

### Memory

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- 8 MB of dynamic random-access memory (DRAM) soldered to the main logic board, expandable to 136 MB using 168-pin JEDEC-standard DIMM devices.
- Two DIMM slots are provided for DRAM expansion.
- 1 MB of built-in video RAM
- 4 MB of read-only memory (ROM)
- 8K of nonvolatile parameter memory
- One socket for an optional 256K Level 2 cache DIMM card

### Internal disk drives

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- Apple SuperDrive 1.4 MB high-density floppy disk drive
- Apple (Integrated Device Electronics) IDE hard disk drive
- Internal quadruple- or 8x-speed CD-ROM drive, depending on configuration.

Display

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- 15-in RGB color display (12.8-in diagonal viewable image size)
- 0.28-mm dot pitch
- Noninterlaced, flat, square cathode-ray tube (CRT)
- User-adjustable resolutions from 640 by 480 pixels to 832 by 624 pixels
- Resolution can be changed without restarting the computer
- Refresh rate up to 75 Hz
- Meets SWEDAC MPR2 international guidelines for magnetic-field emissions

Video

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Begin\_Table

Graphics modes supported

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Resolution	Colors	Scan frequencies
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640 x 480	16-bit	60 Hz and 67 Hz
800 x 600	16-bit	60 Hz
800 x 600	8-bit	72 Hz
832 x 624	8-bit	75 Hz

End\_Graphic

Video output

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With the optional external video connector kit, your Power Macintosh 5400 Series can be connected to a video presentation system or support video mirroring (connecting a second monitor for display purposes) at 640 x 480 resolution on the following monitors:

- Macintosh 12" Color Display
- Macintosh 13" Color Display
- Apple Color Plus 14" Display
- Macintosh Color Display
- Apple Multiple Scan 14 Display
- Apple Multiple Scan 15 Display
- Apple Multiple Scan 17 Display
- Apple Multiple Scan 20 Display
- VGA monitors (a plug adapter may be required)

You can use the following monitors for video mirroring at 800 x 600 and 832 x 624 resolutions:

- Apple SVGA displays
- Apple Multiple Scan 14 Display
- Apple Multiple Scan 15 Display
- Apple Multiple Scan 17 Display
- Apple Multiple Scan 20 Display

Video input

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With the optional video input card, your Power Macintosh 5400 Series can connect to a video camera, VCR, or other video equipment.

- Format: composite or S-video
- Transmission Format: industry standard NTSC/PAL/SECAM
- Polarity: sync negative
- Level: .8 Vpp minimum to 2.0 peak-to-peak (p-p) maximum ("S" chroma level 1.4 Vpp maximum)
- Impedance: 75 ohms ( ) internally terminated
- DC offset: +/- 1.0 volts (V) maximum
- 32-bit video data bus

#### Sound

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- 16-bit stereo input and output featuring SRS surround sound
- Sample rates of 11.025, 22.05 and 44.1 kilohertz (kHz)
- Sound input connector line level: 2 volts peak-to-peak (Vpp) nominal, into 10-kilohms (k ) impedance (minimum)
- Sound output connector line level: 2 Vpp nominal, into 32- impedance
- Sound input signal-to-noise ratio (SNR): >70 decibels (dB)
- Sound output SNR: >70 dB (SRS disabled)

#### Clock/calendar

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- CMOS custom circuitry with long-life battery

#### Keyboard

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- Supports all Apple Desktop Bus (ADB) keyboards

#### Mouse

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- Supports all models of the ADB mouse

#### Interfaces

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- One Apple Desktop Bus (ADB) port supporting up to three ADB input devices (such as a trackball, keyboard, or mouse) daisy-chained through a synchronous serial bus.
- Optional monitor port supporting the connection of color and grayscale monitors of various sizes and resolutions for video mirroring.
- One internal expansion slot supporting 6.88-inch 15 watt Peripheral Component Interconnect (PCI) expansion cards.
- One internal expansion slot supporting communications cards (i.e. modem, fax, high speed networking).
- One internal expansion slot supporting video input cards using NTSC.
- Two RS-232/RS-422 serial GeoPort-compatible ports,
- One 3.5 mm sound output port for headphones or line-level devices.
- One 3.5 mm sound input port for stereo sound input. The sound input port supports the Apple PlainTalk Microphone that comes with some Macintosh computers.
- One external standard SCSI interface that supports up to 6 external SCSI devices.

Additional features

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- Built-in microphone
- Built-in stereo speakers
- Support for optional infrared remote control
- Front panel push-button controls for volume and picture
- Power on and off from keyboard and optional remote control (included with the optional TV tuner card)

Size and weight

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Weight: 47 lbs. (21.15 kg) Varies depending on installed options.

Height: 17.5 in. (445 mm)

Width: 15.1 in. (383 mm)

Depth: 16 in.(406 mm)

Environment

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- Operating temperature: 10° C to 40° C (50° F to 104° F)
- Storage temperature: -40° C to 47° C (-40° F to 116.6° F)
- Relative humidity: 5% to 95% (noncondensing)
- Altitude: Works below 3048 m (10,000 ft.)

Power

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AC line input

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- Line voltage: 90-264 V alternating current (AC), RMS single phase, automatically configured.
- Frequency: 47-63 Hz
- Power: 220 watts maximum continuous

DC power

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- Continuous output: 73 watts

Apple Desktop Bus (ADB)

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- Mouse draws up to 10 milliamperes (mA)
- Keyboard draws 25-80 mA (varies with keyboard model used)
- Maximum current available for all ADB devices and all serial devices: 500 mA
- The ADB port can support up to three daisy-chained ADB devices.

Power Allowances for External Devices

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The following table shows power allowances for external devices connected to input ports:

Device	Voltage	Current	Power
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Microphone	+5 V	1 mA	5 mW
GeoPort telecom adapter & ADB devices	+5 V	500 mA	2.5 W
S-video input connector	+12 V	250 mA	3 W

Power Allowances for Expansion Cards

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The following table shows power allowances for installed expansion cards.

Device	Voltage	Current	Power
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PCI expansion card (15 watts)*	+3.3 V	2 A	6.6 W
	+5 V	3 A	15 W
	-12 V	500 mA	6 W
Communications expansion card**	+5 V	500 mA	2.5 W
	+12 V	100 mA	1.2 W
Video expansion card***	+5 V	200 mA	1 W
	+12 V	300 mA	3.6 W

Notes:

\*The PCI expansion card should not consume more than 15 watts of power total.

\*\*The communications card should not consume more than 2.5 watts of power total.

\*\*\*The video input card should not consume more than 4.6 watts of power total.

Article Change History:

12 Jul 1996 - Updated CD information.

14 May 1996 - Updated sound information.

26 Apr 1996 - Updated information.

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