



# Macintosh Server G4 with Mac OS X Server

Built around the PowerPC G4 with Velocity Engine, the Macintosh Server G4 with Mac OS X Server delivers industry-leading web and application server software. Combine that with the innovative capabilities of the QuickTime Streaming Server, and you have the most powerful, most versatile, most scalable Macintosh server ever—yours at an exceptional value.





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## Features

### High-performance hardware

- 500-megahertz PowerPC G4 processor featuring Velocity Engine advanced vector processing technology
- 1 megabyte of backside level 2 cache running at half the processor speed
- Support for up to five simultaneous Ethernet connections with built-in 10/100BASE-T Ethernet connector and four-port 10/100BASE-T Ethernet PCI card
- Support for up to 1 gigabyte of high-performance PC100 SDRAM
- One 18GB 10,000-rpm Ultra2 LVD SCSI hard disk drive with dual-channel PCI card supporting up to 80-megabyte-per-second data transfer per channel
- Dual (redundant) power supply that provides immediate power should the primary power supply fail

### Stable and scalable software

- Superb system reliability with the Mac OS X Server operating system based on Mach kernel and BSD 4.4 technology
- Protected memory and full process management for efficient, rock-solid performance
- Preemptive multitasking to run multiple services smoothly
- Multithreaded, concurrent I/O to support multiple networks simultaneously

### Highly configurable services for the Internet and Macintosh networks

- Apache web server software, the world's most popular HTTP server
- QuickTime Streaming Server for streaming multimedia content on the web
- WebObjects software for creating high-performance network applications
- NetBoot and Macintosh Management technology for managing multiple Macintosh computers on a network from a single system
- Apple file services

The Macintosh Server G4 with Mac OS X Server is an extremely powerful and versatile Internet and workgroup server. It combines the PowerPC G4 with Velocity Engine and Apple's Mac OS X Server software to provide higher performance and greater reliability for Internet, publishing, and education server applications.

At the heart of the Macintosh Server G4 with Mac OS X Server is the high-speed PowerPC G4 with Velocity Engine. Using true independent vector processing, the PowerPC G4 with Velocity Engine brings supercomputer performance to server systems for the first time ever. With its advanced 128-bit vector processing unit and 162 instructions dedicated to handling vector and multimedia data, the PowerPC G4 processor enables the Macintosh Server G4 with Mac OS X Server to manage even the heaviest network loads at breathtakingly efficient speeds. System performance is further enhanced through the use of a superfast bus and a 1-megabyte backside cache.

Two industry-leading Internet server applications—Apache and WebObjects—are included with Mac OS X Server. Apache is the world's most popular HTTP server, delivering both static and dynamically generated HTML pages quickly and reliably. Fully integrated with Mac OS X Server, Apache can deliver content generated by Apple's WebObjects software, the most flexible and scalable way to develop and deploy applications for viewing from any web browser.

Also included is the QuickTime Streaming Server, which provides even more dynamic content to users on the web. Using industry-standard protocols (RTSP and RTP) and up to 2,000 data streams, the QuickTime Streaming Server streams QuickTime content to any Macintosh or PC with QuickTime installed. QuickTime capabilities such as streaming live and stored audio and video over the Internet enable educators to deliver distance learning and online curriculum.

Apple's NetBoot software enables a network of Macintosh computers to run from the same shared System Folder and applications volume stored on the NetBoot server. Simply update the NetBoot server, and all other computers have instant access to the new configuration. This innovative approach can significantly lower support costs, as well as reduce the amount of time required to keep disparate Macintosh systems up to date. In addition, Macintosh Management server software gives users secure access to their personal desktops, files, and applications from any Macintosh on the network.

Finally, to ensure maximum server performance, the Macintosh Server G4 with Mac OS X Server offers highly scalable file services to more than 1,000 concurrent users, capable of supporting more than 4,000 open files and pushing hundreds of megabits across the network. By all measures of features and performance, it's the most powerful, scalable Macintosh server ever.



## Specification Sheet

### Macintosh Server G4 with Mac OS X Server

## Technical Specifications

### Processor

- 500-MHz PowerPC G4 processor
- Velocity Engine vector processing unit with 162 integrated Single Instruction Multiple Data (SIMD) instructions
- Full 128-bit internal memory data paths
- Powerful new floating-point unit supporting single-cycle, double-precision calculations
- Data stream prefetching operations supporting four simultaneous 32-bit data streams
- 1MB backside level 2 cache running at half the processor speed
- 100-MHz system bus supporting up to 800-MBps data throughput

### Memory

- 256MB of PC100 SDRAM (3.3-volt, unbuffered, 64-bit-wide, 168-pin, running at 100 MHz)
- Four DIMM slots support up to 1GB of PC100 SDRAM using the following DIMMs:
  - 32MB, 64MB, or 128MB DIMMs (64-bit-wide, 64-Mbit technology)
  - 128MB or 256MB DIMMs (64-bit-wide, 128-Mbit technology)
  - 512MB DIMMs (64-bit-wide, 256-Mbit technology)

### Storage

- 18GB 10,000-rpm Ultra2 LVD SCSI hard disk drive with PCI card
- DVD-ROM drive
- Three 3.5-inch hard disk drive expansion bays
  - One SCSI drive preinstalled in standard configurations
  - Support for up to two internal ATA drives
  - Support for up to three internal SCSI drives

### Graphics support

- ATI RAGE 128 Pro graphics card with 16MB of SDRAM graphics memory installed in a dedicated AGP 2X graphics slot
- Support for up to 1920- by 1200-pixel resolution at 32 bits per pixel (millions of colors) and up to 85-Hz refresh rate
- 15-pin mini D-Sub VGA connector

### Interfaces

- Connectivity
  - Two Universal Serial Bus (USB) ports supporting Apple USB Mouse and Keyboard
- Communications
  - Built-in 10/100BASE-T Ethernet connector and four-port 10/100BASE-T Ethernet PCI card (RJ-45 connectors)
- Expansion
  - Four expansion slots: three full-length 64-bit, 33-MHz PCI slots (two of which contain the Ultra2 LVD SCSI card and the four-port Ethernet card) and one AGP 2X slot (dedicated to the ATI RAGE 128 Pro graphics card)
- Video
  - 15-pin mini D-Sub VGA connector
- Sound
  - Minijacks for 16-bit stereo audio input and output: 44.1-kHz sampling rate
  - Built-in speaker

### Keyboard and mouse

- Apple USB Keyboard with 2-meter cable
- Apple USB Mouse

### Electrical requirements

- Line voltage: 115V AC (90V to 132V AC) or 230V AC (180V to 264V AC)
- Frequency: 47 to 63 Hz, single phase
- Maximum continuous power (not including display): 155W

### Environmental requirements

- Operating temperature: 50° to 95° F (10° to 35° C)
- Storage temperature: -40° to 116° F (-40° to 47° C)
- Relative humidity: 5% to 95% noncondensing
- Maximum altitude: 10,000 feet (3,048 m)

### Size and weight

- Height: 17.0 inches (43.2 cm)
- Width: 8.9 inches (22.6 cm)
- Depth: 18.4 inches (46.7 cm)
- Weight: 30.0 pounds (13.6 kg)



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## Ordering Information

### Macintosh Server G4 with Mac OS X Server

Order no. M7843LL/A

- Macintosh Server G4
- Apple USB Keyboard and Mouse
- Mac OS X Server operating system (preinstalled)
- Apache web server
- Apple file services with unlimited-client license
- OmniWeb browser software
- OmniGroup Backup Personal Edition
- Mac OS compatibility environment
- Java, Perl, Sendmail, FTP, Telnet, and NFS
- QuickTime Streaming Server (preinstalled)
- WebObjects Developer (preinstalled) with deployment license for 50 connections per minute
- NetBoot and Macintosh Management software (preinstalled) with unlimited-client license
- Complete setup, learning, and reference documentation

Product includes some electronic documentation. Bundled software provided on CD-ROM.

## Build-to-Order Options

In addition to choosing a prebuilt system, you can order a custom-configured computer from your authorized Apple reseller or the online Apple Store. Build-to-order options include memory, hard disk drives, SCSI support, and more. For up-to-date information about options and availability, visit [www.apple.com/store](http://www.apple.com/store).

## Related Products

- Apple Studio Display (17-inch; 16-inch viewable); order no. M6221

## For More Information

For more information about the Macintosh Server G4, visit [www.apple.com/powermac/server](http://www.apple.com/powermac/server). For more information about Mac OS X Server, visit [www.apple.com/macosx/server](http://www.apple.com/macosx/server). To find the latest information on hardware and software for your Macintosh, visit the Macintosh Products Guide at [www.apple.com/guide](http://www.apple.com/guide).

To purchase these products from the Apple Store, go to [www.apple.com/store](http://www.apple.com/store) or call 800-MY-APPLE. To find an authorized Apple reseller in your area, call 800-538-9696.

Safeguard your Macintosh for three full years with the optional AppleCare Protection Plan. You'll benefit from a host of services, including powerful diagnostic software tools, online support, regular email updates, and Apple's toll-free helpline. And for most problems, no problem: We'll fix your hardware for the next three years. You have the assurance of being helped by Apple certified technicians using genuine Apple parts—and the reassurance of knowing that your Macintosh is covered. For more information, visit [www.apple.com/support](http://www.apple.com/support).

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