

Apple Workgroup Server 95



The Apple Workgroup Server 95 has the performance, reliability, scalability, and manageability you need to meet file and print or database server requirements for large workgroups. The most powerful and expandable member of Apple's server family, this system is based on the 33-megahertz Motorola 68040 microprocessor and offers SCSI-DMA support, parity memory, and a large second-level 68040 memory cache. These hardware features are especially important for a high-performance server. This hardware is driven by a highly-tuned server version of A/UX, Apple's implementation of the multitasking UNIX® operating system, enabling the system to deliver high performance network services to data-intensive workgroups of up to 50 active users.

Apple servers continue the "plug and play" tradition established by the Macintosh. Installation takes just minutes, and because it's a snap to

maintain, reconfigure, and expand, over the long run the Apple Workgroup Server 95 offers the lowest cost of ownership in its class. Every system ships with a powerful yet easy-to-use backup utility that quickly backs up server data on the optional internal DDS-DC 4mm tape drive. (The optional internal DDS-DC drive is included in the configuration pictured above.) A key lock switch is included to secure your server.

You can expand the server's power and capabilities by adding SCSI devices, increasing DRAM, and increasing the second-level memory cache. The server can quickly and flexibly grow to meet additional demands.

To provide file and print or database server resources for demanding desktop-publishing, business-administration, information-access, or document-management requirements, build your solutions around the Apple Workgroup Server 95.

Apple Workgroup Server 95 Features

Power and speed

- > 33 MHz 68040 microprocessor

Memory

- > 16 MB of RAM, expandable to 256 MB
- > 128 KB of cache, expandable to 512 KB

Expansion

- > Ten built-in ports for peripherals
- > Up to four internal storage devices, 20 SCSI devices total
- > Five NuBus expansion slots

Display

- > Built-in support for all Apple monitors
- > Up to 32 bits per pixel for true color

Usability

- > Easy to set up, learn, and use

System software

- > A/UX, a complete, industry-standard version of the UNIX operating system with Macintosh System 7 features and interface

Networking

- > Built-in AppleTalk capability
- > On-board Ethernet capability

Compatibility

- > Macintosh, MS-DOS, OS/2, and ProDOS floppy disk formats

Technical Specifications

Microprocessor

- > MC68040, 32-bit architecture, running at 33 MHz clock speed
- > Integral Paged Memory Management Unit (PMMU), Floating Point Unit (FPU), and 8K-cache architecture

Memory

- > Comes with 16 MB of parity RAM standard and 12 memory expansion slots for SIMMs (Single Inline Memory Modules)
- > Expands to up to 256 MB of RAM through installation of 16 MB SIMMs in the empty slots and replacement of existing 4 MB RAM SIMMs with 16 MB RAM chips
- > 128K second-level 68040 memory cache on board, expandable to 512K

Operating System

- > Version of multitasking, industry-standard UNIX operating system
- > Performance-tuned for file and database services (including asynchronous I/O and SCSI DMA driver support)

Mass storage devices

- > Built-in Apple SuperDrive 1.4 MB floppy disk drive
- > Support for up to three additional internal devices, such as a DDS-DC 4mm tape drive, CD-ROM drive, or Apple SCSI hard disk drive (several capacities available)
- > Support for additional non-Apple drives

Interfaces

- > One Apple Desktop Bus (ADB) port, supporting a keyboard, mouse, and other devices daisy-chained through a synchronous serial bus
- > Two serial (RS-232/RS-422) ports, 230.4 Kbit/sec. maximum (up to 0.920 Mbit/sec if clocked externally)
- > Two SCSI DMA channels, four SCSI bus interfaces total
- > Video port to support RGB and monochrome monitors of various sizes and resolutions
- > Five internal NuBus expansion slots (one used by PDS card)
- > Sound-input port for monaural sound input
- > Dual mono line input ports
- > AAUI Ethernet connector

Video display

- > Supports Apple monochrome and color monitors, including:
 - Macintosh 12" RGB Display
 - Macintosh 12" Monochrome Display
 - AppleColor High-Resolution RGB Monitor
 - Macintosh Portrait Display
 - Macintosh 16" Color Display
 - Macintosh Two-Page Monochrome Monitor
 - Macintosh 21" Color Display
- > Supports other non-Apple monitors, including some 19", VGA, SVGA, NTSC, and PAL

Video RAM (VRAM)

- > Can support up to 2 MB
- > 1 MB standard supports:
 - 32,768 colors on the Macintosh 12-inch RGB Display
 - 256 colors on the AppleColor High-Resolution RGB Display (13"), Macintosh Color Display (14"), and Macintosh 16" Color Display
 - 256 shades of gray on the Macintosh Portrait Display (15")
 - 16 colors on the Macintosh 21" Color Display

Keyboard and mouse

- > Supports all Apple Desktop Bus keyboards
- > Apple Desktop Bus Mouse II

Clock/calendar

- > Custom chip with long-life lithium battery

Electrical requirements

- > Line voltage: 100 to 240 V AC, RMS automatically configured
- > Frequency: 50 to 60 Hz, single phase
- > Power: 303 W maximum, not including display power

ADB power requirements

- > Maximum current draw for all ADB devices: 500 mA (recommended maximum of three ADB devices)
- > Mouse draws 80 mA
- > Keyboard draws 25 to 80 mA, depending on the keyboard model used

Operating environment

- > Operating temperature: 50° F to 104° F (10° C to 40° C)
- > Storage temperature: -40° F to 116.6° F (-40° C to 47° C)
- > Relative humidity: 20% to 80% noncondensing
- > Maximum altitude: 10,000 ft. (3,048 m)

Size and weight

Main unit:

- > Height: 18.6 in. (47.3 cm)
- > Width: 8.9 in. (22.4 cm)
- > Depth: 20.6 in. (52.3 cm)
- > Weight: 36 lb. 12 oz. (16.7 kg)*

Mouse:

- > Height: 1.3 in. (3.3 cm)
- > Width: 2.4 in. (6.2 cm)
- > Depth: 4.2 in. (10.7 cm)
- > Weight: 4.0 oz. (0.10 kg)

*Weight will be greater with internal hard disks and additional internal storage devices.

Ordering Information

Apple Workgroup Server 95 16/SD/230/128

Order No. M6855LL/A

- > Apple Workgroup Server 95 computer with 16 MB of RAM, 230 MB internal hard disk, built-in 1.4 MB Apple SuperDrive, and 128K of memory cache
- > Mouse
- > System software for file and print service environment, Apple documentation viewer, and Retrospect Remote backup software preloaded on hard drive
- > System software installer CD-ROM (one button installation of above software)
- > Complete on-line and hard-copy documentation
- > Limited warranty statement

Apple Workgroup Server 95 16/SD/500/256/DDS-DC

Order No. M6865LL/A

- > Apple Workgroup Server 95 computer with 16 MB of RAM, 500 MB internal hard disk, built-in 1.4 MB Apple SuperDrive, 256K of second-level 68040 memory cache, and an internal digital data storage-data compression (DDS-DC) 4mm tape backup drive
- > All other features included with the Apple Workgroup Server 95 16/SD/230/128

Apple Workgroup Server 95 32/SD/1000/512/DDS-DC/AppleShare Pro

Order No. M6875LL/A

- > Apple Workgroup Server 95 computer with 32 megabytes of RAM, built-in 1.4-megabyte Apple SuperDrive, 1000-megabyte internal hard disk, 512K of second-level 68040 memory cache, and an internal digital data storage-data compression (DDS-DC) 4mm tape backup drive
- > AppleShare Pro file and print server software preloaded on hard drive, on-line documentation for AppleShare Pro, and installer software on CD-ROM
- > All other features included with the Apple Workgroup Server 95 16/SD/230/128

Apple Workgroup Server 95 32/SD/230/500/256/DDS-DC

Order No. M6885LL/A

- > Apple Workgroup Server 95 computer with 32 megabytes of RAM, built-in 1.4-megabyte Apple SuperDrive, 230- and 500-megabyte internal hard disk, 256K of second-level 68040 memory cache, and an internal digital data storage-data compression (DDS-DC) 4mm tape backup drive
- > System software for database service environment, Apple documentation viewer and Retrospect Remote backup software preloaded on hard drive
- > System software installer CD-ROM (one-button installation of above software)
- > Complete on-line and hard-copy documentation
- > Limited warranty statement

Apple Workgroup Server 95 48/SD/230/1000/512/DDS-DC

Order No. M6895LL/A

- > Apple Workgroup Server 95 computer with 48 megabytes of RAM, built-in 1.4-megabyte Apple SuperDrive, 230- and 1000-megabyte internal hard disk, 512K of second-level 68040 memory cache, and an internal digital data storage-data compression (DDS-DC) 4mm tape backup drive
- > All other features included with the Apple Workgroup Server 95 32/SD/230/500/256/DDS-DC

Ordering Information for Upgrade Kits and Accessory Kits

Apple Workgroup Server PDS Card Upgrade Kit*

Order No. M6940Z/A

- > Processor direct slot card for the Macintosh Quadra 900 or 950 (128K second-level memory cache on-board)
- > System software installer CD-ROM (one-button installation of system software, Apple documentation viewer and Retrospect Remote backup software)
- > Complete documentation
- > Limited warranty statement
- > CPU labels

Apple Workgroup Server PDS Card/DDS-DC Drive Upgrade Kit*

Order No. M6945Z/A

- > Processor-direct slot card for the Macintosh Quadra 900 or 950 (128K second-level cache on-board)
- > Internal digital data storage-data compression (DDS-DC) 4mm tape backup drive
- > All other features included with the Apple Workgroup Server PDS Card Upgrade Kit for the Macintosh Quadra 900 or 950

**These kits upgrade a Macintosh Quadra 900 or 950 to an Apple Workgroup Server 95. A CD-ROM drive is required to install system software.*

Apple Workgroup Server 95–128KB/Tag Second-Level Memory Cache Upgrade Kit

Order No. M6810Z/A

Adds an additional 128K and Tag second-level 68040 memory cache to the PDS card, for a total of 256K of second-level memory cache

Apple Workgroup Server 95 - 256KB Second- Level Memory Cache Upgrade Kit

Order No. M6815Z/A

Adds an additional 256K of second-level 68040 memory cache to the PDS card for a total of 512K second-level memory (Requires installation of 128KB/Tag kit)

Apple Workgroup Server 95–16MB Parity DRAM Upgrade Kit

Order No. M6820Z/A

Adds an additional 16 MB of parity DRAM to the Apple Workgroup Server 95

Blank DDS Tape 5 Pak

Order No. M2092Z/A

Blank DDS tape for use with internal DDS-DC drive. (Tape uses the Media Recognition System (MRS) standard.)



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