



# Apple Workgroup Server 60



The Apple Workgroup Server 60 provides the performance, reliability, and manageability you need to meet small and medium workgroup requirements for file and print server applications. The most affordable of Apple's server family, this system is based on the 20-megahertz Motorola 68040 microprocessor. With on-board Ethernet and built-in AppleTalk networking capability, this product is ideal for the needs of up to 20 users (that is, users simultaneously reading from and writing to the server).

The Apple Workgroup Server 60 gives you flexibility and choice. You can choose a 230 MB or 500 MB internal hard disk, add an internal CD-ROM drive, and install a NuBus™ or processor-direct slot card. (The optional internal CD-ROM drive is included in the configuration pictured above.) A high-speed SCSI interface lets you add peripherals,

such as hard disks and other high-capacity storage devices.

The Apple Workgroup Server 60 continues the "plug and play" tradition established by the Macintosh. System 7 and high-performance AppleShare 4.0 file and print server software is preloaded, so all you do is attach your monitor, keyboard, power cables, and network connection, and in minutes the server is available to users. Because it's a snap to maintain, manage, and reconfigure, over the long run the Apple Workgroup Server 60 offers the lowest cost of ownership in its class.

To provide an entry-level file and print server solution for your small business, classroom, or similar environment, build your solutions around the Apple Workgroup Server 60.

## Apple Workgroup Server 60 Features

### Power and speed

- > 20 MHz 68040 microprocessor; 32-bit data bus

### Memory

- > 8 MB of RAM, expandable to 68 MB

### Display

- > Works with all Apple displays
- > 256 colors, expandable to 32,768

### Expansion

- > Eight built-in ports for peripherals
- > Slot for additional expansion card
- > Optional internal CD-ROM drive

### Usability

- > Easy to set up, learn, use, and extend

### System software

- > System 7 operating system
- > AppleShare 4.0 file and print server software

### Networking

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

### Compatibility

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

# Apple Workgroup Server 60

## Technical Specifications

### Microprocessor

- > MC68040, running at 20 MHz clock speed; 32-bit data bus; no floating-point unit (FPU)
- > Integral Paged Memory Management Unit (PMMU) and 8K cache architecture

### Memory

- > Comes with 8 MB of RAM
- > Expandable to 68 MB of RAM by adding Single Inline Memory Modules (SIMMs) to two 72-pin slots

### Disk drives

- > One built-in Apple SuperDrive 1.4-MB floppy disk drive
- > One internal 230 MB or 500 MB hard disk
- > Accommodates one 5.25-in. half-height device, such as the AppleCD 300i internal CD-ROM drive

### Video display

- > Supports all Apple displays
- > Works with a wide range of third-party displays, including some 19-inch, VGA, SVGA, NTSC, and PAL monitors

### Video RAM (VRAM)

- > Can support up to 1024K
- > 512K standard supports:
  - 32,768 colors on the Macintosh 12" RGB Display
  - 256 colors on the AppleColor High-Resolution RGB Display (13"), Macintosh Color Display (14"), and Macintosh 16-inch Color Display
  - 256 shades of gray on the Macintosh 12" Monochrome Display
  - 16 shades of gray on the Macintosh Portrait Display (15")
  - 16 colors on the Macintosh 21" Color Display

### Interfaces

- > Internal expansion slot for one processor-direct or 7-inch NuBus expansion card (requires adapter)
- > SCSI interface for connecting up to six external peripheral devices
- > AAUI Ethernet connector
- > Two serial (RS-232/RS-422) ports
- > One video port for color and monochrome displays of various sizes and resolutions
- > One sound-output port (stereo) for external amplifier or headphones, and CD playthrough
- > One sound-input port for monaural sound input
- > Two Apple Desktop Bus (ADB) ports for a keyboard, mouse, and other devices

### Sound generator

- > Custom integrated circuit that drives a stereo miniature headphone jack (22 kHz sample rate)

### Keyboard and mouse

- > Several ADB keyboards with numeric keypads available
- > Apple Desktop Bus Mouse II

### Clock/calendar

- > Custom integrated circuit with long-life lithium battery

### Disability access

- > CloseView, Easy Access, and visible-beep software is built in. These and third-party options provide alternative input and output devices

### Power requirements

- > Line voltage: 100 to 240 V AC, RMS single phase, automatically configured
- > Frequency: 47 to 63 Hz
- > Power: 86 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 10 mA
- > Keyboard draws 25 to 80 mA, depending on the model used

### Size and weight

#### Main Unit:

- > Height: 3.4 in. (8.5 cm)
- > Width: 16.3 in. (41.5 cm)
- > Depth: 15.6 in. (39.7 cm)
- > Weight\*: 14.0 lbs (6.4 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 vary based on internal devices installed

### 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: 5% to 95% noncondensing
- > Maximum altitude: 10,000 ft. (3,048 m)

## Ordering Information

### Apple Workgroup Server 60 8/230

- > Apple Workgroup Server 60 computer with 8 MB of RAM, built-in 1.4 MB Apple SuperDrive, and internal 230 MB hard disk drive
- > Mouse
- > System software, AppleShare 4.0 file and print server software, and Apple documentation viewer preloaded on hard drive
- > AppleShare file and print server software and installer software
- > Complete on-line and hard-copy documentation

- > Limited warranty statement

### Other configurations

- > Internal 500 MB hard disk
- > Internal AppleCD 300i CD-ROM drive

### NuBus Adapter

Order No. M1402LL/A

- > Macintosh Centris 610 NuBus Adapter (fully compatible with the Apple Workgroup Server 60)
- > Limited warranty statement

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