



# Tech Info Library

## Network Server 500 and 700: Technical Specifications (7/96)

Revised: 7/29/96  
Security: Everyone

Network Server 500 and 700: Technical Specifications (7/96)

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TOPIC -----

This article provides the technical specifications for the Network Server 500 and Network Server 700.

DISCUSSION -----

### Microprocessor

#### Network Server 500

- PowerPC 604 RISC microprocessor running at 132 MHz, located on upgradable, replaceable CPU card
- Integrated floating-point unit and 32K level 1 cache memory
- 512K level 2 cache memory

#### Network Server 700

- PowerPC 604 RISC microprocessor running at 150 MHz, located on upgradable, replaceable CPU card
- Integrated floating-point unit and 32K level 1 cache memory
- 1MB level 2 cache memory

### Memory

#### Network Server 500

- 32MB of error-detecting parity DRAM
- Can be expanded to up to 512MB of DRAM
- 8 slots for 168-pin, 72-bit, 60ns DIMMs
- DIMM operating range is 5 volts

#### Network Server 700

- 48MB or 32MB of error-detecting parity DRAM
- Can be expanded to up to 512MB of DRAM
- 8 slots for 168-pin, 72-bit, 60ns DIMMs

- DIMM operating range is 5 volts

#### Storage

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##### Network Server 500

- Supports seven internal SCSI devices
- One AppleCD 600i CD-ROM drive (up to 600KB/sec data-transfer rate) standard on all configurations
- One DDS-2 DAT drive (4GB uncompressed, up to 12GB compressed); some configurations
- One Apple SuperDrive 1.44MB floppy disk drive

##### Network Server 700

- Supports nine internal SCSI devices including two fixed-mount half-height drives
- One AppleCD 600i CD-ROM drive (up to 600KB/sec data-transfer rate) standard on all configurations
- One DDS-2 DAT drive (4GB uncompressed, up to 12GB compressed); some configurations
- One Apple SuperDrive 1.44MB floppy disk drive

#### Software

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##### \*\*IMPORTANT NOTE\*\*

With the purchase of any Network Server 500 or Network Server 700, you must purchase the AIX for Apple Network Servers Accessory Kit (M4525Z/A) to obtain AIX for Apple Network Servers version 4.1.4. AIX is not pre-installed on Network Servers.

##### Network Server 500

- AIX for Apple Network Servers version 4.1.4
- Trial versions of IPT uShare and CanOPI; Helios EtherShare, EtherShare OPI and PCShare; and Legato Networker

##### Network Server 700

- AIX for Apple Network Servers version 4.1.4
- Trial versions of IPT uShare and CanOPI; Helios EtherShare, EtherShare OPI and PCShare; and Legato Networker

#### Networking

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##### Network Server 500

- Built-in Ethernet
- Two serial ports
- Supports AppleTalk and TCP/IP networking software

##### Network Server 700

- Built-in Ethernet
- Two serial ports
- Supports AppleTalk and TCP/IP networking software

#### Displays

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#### Network Server 500

- LCD status display for system monitoring
- Supports up to 20-inch Apple displays at 256 colors
- Supports most third-party displays as well as VGA and SVGA monitors

#### Network Server 700

- LCD status display for system monitoring
- Supports up to 20-inch Apple displays at 256 colors
- Supports most third-party displays as well as VGA and SVGA monitors

#### Display support

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#### Network Server 500

- Built-in 1MB VRAM
- Resolutions:
  - 1024 pixels by 768 pixels
  - 800 pixels by 600 pixels
  - 640 pixels by 480 pixels

#### Network Server 700

- Built-in 1MB VRAM
- Resolutions:
  - 1024 pixels by 768 pixels
  - 800 pixels by 600 pixels
  - 640 pixels by 480 pixels

#### Interfaces

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#### Network Server 500

- Six PCI expansion slots
- One Apple Desktop Bus (ADB) port for a keyboard, mouse, and other devices
- AAUI-15 Ethernet connector (requires adapter)
- Two DMA DIN-8 serial ports (RS-232/RS-422)
- Two Fast/Wide SCSI-2 channels support 7 internal devices
- Supports 56 external devices using optional PCI RAID cards
- SCSI-1 channel supports up to 7 external devices (compatible with SCSI-1 devices)
- 16-bit stereo sound input and output ports
- Standard three-row DB-15 video port for display support (Macintosh Display Adapter included)

#### Network Server 700

- Six PCI expansion slots
- One Apple Desktop Bus (ADB) port for a keyboard, mouse, and other devices
- AAUI-15 Ethernet connector (requires adapter)
- Two DMA DIN-8 serial ports (RS-232/RS-422)
- Two Fast/Wide SCSI-2 channels support 9 internal devices
- Supports 56 external devices using optional PCI RAID cards
- SCSI-1 channel supports up to 7 external devices (compatible with SCSI-1 devices)
- 16-bit stereo sound input and output ports

- Standard three-row DB-15 video port for display support (Macintosh Display Adapter included)

#### Enclosure

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##### Network Server 500

- Front and back key-controlled access to all components, including:
  - Three-position translucent locking front door that offers three levels of access: The first level allows full access to seven front SCSI drives and media such as CD-ROMs and tape cartridges. The second level allows removable media access for replacement of floppy disks, tape cartridges and CD-ROMs, but prohibits removal of storage drives and power supplies. The third level locks the access door closed, and prohibits access to storage drives, removable media, and power supplies.
  - Keylock rear slide-out cabinet access to logic board, processor card, DIMM sockets, and PCI slots (keylock powers down system when unlocked)
  - Keylock rear cabinet door
- Seven tray-mount SCSI drive bays with hot-swap option
- Locking wheels
- Dual hot-swappable fans
- Speaker
- Security slot (requires a third-party accessory)
- Power cord lock
- Optional 19-inch rack-mount kit

##### Network Server 700

- Front and back key-controlled access to all components, including:
  - Three-position translucent locking front bay door that offers three levels of access: The first level allows full access to seven front SCSI drives and media such as CD-ROMs and tape cartridges, as well as the power supplies. The second level allows removable media access for replacement of floppy disks, tape cartridges and CD-ROMs, but prohibits removal of storage drives and power supplies. The third level, locks the access door closed, and prohibits access to storage drives, removable media, and power supplies.
  - Keylock rear slide-out cabinet access to logic board, processor card, DIMM sockets, and PCI slots (keylock powers down system when unlocked)
  - Keylock rear cabinet door for access to two fixed-mount drive bays
- Seven tray-mount SCSI drive bays with hot-swap option
- Optional hot swappable power supplies
- Locking wheels
- Dual hot-swappable fans
- Speaker
- Security slot (requires a third-party accessory)
- Power cord lock
- Optional 19-inch rack-mount kit

#### Drive bays

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##### Network Server 500

- Front bays support seven half-height or three full-height (5.25-inch) tray-mounted SCSI devices, and electronically configure SCSI IDs

dependent on bay location

- Top four bays share one (20MB/sec) Fast/Wide SCSI-2 channel
- Bottom three bays share a second (20MB/sec) Fast/Wide SCSI-2 channel

#### Network Server 700

- Front bays support seven half-height or three full-height (5.25-inch) tray-mounted SCSI devices, and electronically configure SCSI IDs dependent on bay location
- Top four front bays share one (20MB/sec) Fast/Wide SCSI-2 channel
- Bottom three front bays share a second (20MB/sec) Fast/Wide SCSI-2 channel
- Two rear fixed-mount bays share the same Fast/Wide SCSI-2 channel (along with the bottom three front bays) and support two half-height or one full-height (5.25-inch) devices

#### System administration

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#### Network Server 500

- Supports administration at console with AIX system administration tools
- Supports remote administration from a networked Mac OS, Windows, or UNIX-based computer

#### Network Server 700

- Supports administration at console with AIX system administration tools
- Supports remote administration from a networked Mac OS, Windows, or UNIX-based computer

#### Keyboard and mouse

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#### Network Server 500

- Supports ADB keyboards with numeric keypads
- Includes ADB Mouse II

#### Network Server 700

- Supports ADB keyboards with numeric keypads
- Includes ADB Mouse II

#### Clock/calendar

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#### Network Server 500

- Custom integrated circuit with long-life lithium battery

#### Network Server 700

- Custom integrated circuit with long-life lithium battery

#### Electrical requirements

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#### Network Server 500

- Line voltage: 100 to 240 volts AC, RMS single phase, automatically configured
- Frequency: 50 to 60 Hz, single phase
- Power: 325W maximum for power supply (not including monitor)

Network Server 700

- Line voltage: 100 to 240 volts AC, RMS single phase, automatically configured
- Frequency: 50 to 60 Hz, single phase
- Power: 425 Watt maximum for both main and optional, load-balanced, redundant power supply (not including monitor)

PCI power requirements

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Network Server 500

- Maximum current draw for all PCI cards: 50W

Network Server 700

- Maximum current draw for all PCI cards: 90W

ADB power requirements

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Network Server 500

- Maximum current draw for all ADB devices: 500 mA (a maximum of three ADB devices is recommended)
- Mouse draws 10 mA
- Keyboard draws 25 to 80 mA (varies with keyboard model used)

Network Server 700

- Maximum current draw for all ADB devices: 500 mA (a maximum of three ADB devices is recommended)
- Mouse draws 10 mA
- Keyboard draws 25 to 80 mA (varies with keyboard model used)

Environmental requirements

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Network Server 500

- Operating temperature: 50° to 104° F (10° to 40° C)
- Storage temperature: -40° to 116.6° F (-40° to 47° C)
- Relative humidity: 5% to 95% noncondensing
- Maximum altitude: 0 to 10,000 ft. (0 to 3,048 m)

Network Server 700

- Operating temperature: 50° to 104° F (10° to 40° C)
- Storage temperature: -40° to 116.6° F (-40° to 47° C)
- Relative humidity: 5% to 95% noncondensing
- Maximum altitude: 0 to 10,000 ft. (0 to 3,048 m)

Size and weight

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Network Server 500

- Height: 24.5 in. (62.2 cm)
- Width: 16.5 in. (41.9 cm)
- Depth: 18 in. (45.7 cm)
- Weight: 84 to 92 lb. (38 to 41 kg) -- varies based on internal devices installed

Network Server 700

- Height: 24.5 in. (62.2 cm)
- Width: 16.5 in. (41.9 cm)
- Depth: 18 in. (45.7 cm)
- Weight: 84 to 92 lb. (38 to 41 kg) -- varies based on internal devices installed

Regulatory approval

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Network Server 500

- FCC Class A
- CE
- VCCI

Network Server 700

- FCC Class A
- CE
- VCCI

Article Change History:

- 29 Jul 1996 - Corrected part number for AIX for Apple Network Servers Accessory Kit.
- 22 Mar 1996 - Added DIMM operating range information.
- 04 Mar 1996 - Added Note on the AIX for Apple Network Servers Accessory Kit.

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