



AlphaServer 800 Pedestal and Rackmount

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DIGITAL Systems and Options Catalog

Product Description

The AlphaServer 800 is an Alpha microprocessor server, available in 333 MHz and 400 MHz with 2 MB ECC cache. The system offers up to 8 internal storage devices including a floppy diskette drive, three 5.25-inch bays for optional removable media drives, and four hot swap storage disks. The system supports up to 1 GB of memory and up to 36 GB of internal storage with four 9 GB disks. Integrated on the system board are a Fast Wide Single-Ended SCSI-2 controller, SVGA controller with 1 MB Video ram, a Remote Management Console, two serial ports, one parallel port, and keyboard and mouse interfaces. AlphaServer 800 is available with DIGITAL UNIX, OpenVMS, or Microsoft Windows NT.

The AlphaServer 800 is available in two packages—Pedestal and Rackmount. The pedestal package has an extremely small footprint and can be located practically anywhere in an office environment. The Rackmount package can be mounted in any cabinet equipped with industry-standard RETMA or METRIC rails in compliance with standard EIA 310D. Occupying only 8.75 inches [5U] of vertical rack space, the AlphaServer 800 Rackmount system is an ideal building block for custom configurations suitable for installations where floor space is at a premium, where large storage disk arrays and/or other expansion is required, or when high availability systems are required.

The AlphaServer 800 offers the following high-reliability features: temperature sensor, fan speed sensor, power supply over/under protection and ECC memory. The AlphaServer 800 integrated Remote Management Console (RMC) features significantly enhances the ability to remotely manage and diagnose system conditions. The RMC allows a remote operator to monitor server voltages, temperatures, and fan, as well as manipulate the server (Power On/Off, reset, halt). The RMC is powered by an auxiliary regulator in the main power system that allows system to be remotely interrogated even if system is turned off or shuts down. In the event of an alert condition, the RMC can be setup to automatically dial a user definable pager phone or another system to make a remote operator aware of the alert condition.

Advanced server management features are provided with all AlphaServer 800 shipments via the bundled ServerWORKS Manager kit. The kit provides remote management capability through Simple Network Management Protocol agents (SNMP) for Windows NT, DIGITAL UNIX, and OpenVMS. The management console software runs on any Windows NT or Windows 95 PC. The SNMP agents required to manage the server ship with the TCP/IP services of the operating system (with the exception of Windows NT which ships with the ServerWORKS kit). The SNMP agents collect critical server information including system status, I/O information, storage and disk information and network status information. Thresholds can be set to monitor key server events and alarms are forwarded to the ServerWORKS console. ServerWORKS Manager V2.0 includes remote pager support for alarm notification. In addition to ServerWORKS, DIGITAL includes key third party software applications including DIGITAL Power Management Software for Alpha provided by EXIDE, and application/database management software through BMC software's PATROL family of products.

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Step 1—AlphaServer 800 Pedestal and Rackmount System

- Windows NT Packaged systems include factory installed (FIS) Windows NT Server 4.0 on hard disk drive.
 - North American variants include Windows NT license, media (CD-ROM) kit North American English
 - Non-North American variants include factory installed (FIS) Windows NT 4.0 English.
 - Selection of language specific Windows NT license, media (CD-ROM) kit is **mandatory** for all non-North American variants, see Step 7.
- DIGITAL UNIX and OpenVMS Packaged systems include factory installed (FIS) software on hard disk drive.
 - All DIGITAL UNIX systems ship with UNIX V4.0B
 - All DIGITAL OpenVMS systems ship with OpenVMS V7.1.
- Rackmount systems include slide rails and mounting hardware to mount system in any cabinet equipped with industry-standard RETMA or METRIC rails in compliance with standard EIA 310D; see Step 9 for recommended DIGITAL cabinets.
- Uninterruptable Power Supplies are available; see UPS Information following System Specifications.
- Options ordered that are factory installable, will be factory installed unless specified as **spares**.

Pedestal and Rackmount Systems include

- Alpha microprocessor 21164
 - 333 MHz CPU with 2 MB ECC onboard cache, **or**
 - 400-MHz CPU with 2 MB ECC onboard cache
- Pedestal and Rackmount enclosures with:
 - Six Bus Slots
 - Three 32-bit PCI slots
 - Two EISA slots
 - One shared 64-bit PCI and EISA slot
 - 8 DIMM memory slots support 2 memory options
 - 8 storage slots:
 - One diskette drive slot
 - Three removable media slots
 - Four hot swap storage disks wide and/or wide Ultra SCSI drive slots
 - Integral Fast Wide Single-Ended SCSI-2 controller
 - Integrated SVGA with 1 MB Video Ram
 - 300-Watt switch select (120/240V, 60/50Hz) power supply
 - Two serial ports, support full duplex asynchronous modem control
 - One parallel port
 - PS/2 style keyboard port and mouse port
- PCI-based Fast 100 Ethernet (Twisted Pair)—uses one PCI slot
- 600 MB 12X CD-ROM—uses one removable media slot
- One 2.1 GB wide hard disk drive
- 1.44 MB diskette drive in dedicated slot
- One memory option
- North American Windows NT and DIGITAL UNIX variants include a 104-key, PC style U.S. English keyboard.
- North American OpenVMS variants include a 108 key, VT style U.S. English keyboard.
- Select country-specific keyboard for all non-U.S. variants, see Step 8.
- 3-button mouse
- North American variants include 120V power cord (North America, Japan). Mandatory selection of country-specific power cord for all non-North American variants, see Step 8.
- English language documentation
- EISA Configuration Utility (ECU)
- Integrated Advanced Server Management features, including ServerWorks Manager kit
- Hardware Warranty, Three-year on-site*
- Software Warranty*
 - DIGITAL UNIX and OpenVMS, 90-day SPD conformance with advisory telephone support
 - Warranty on Microsoft's Windows NT Server 4.0 is conformance to the written material accompanying the software for a period of ninety days
- Windows NT Server 4.0 plus 10-client access license, media (CD-ROM) kit, **or**†
- DIGITAL UNIX V4.0B, Unlimited User license, Server Extension license, Internet AlphaServer System Software kit, **or**
- OpenVMS V7.1 base license, System Manager license, Enterprise Integrated Package (EIP)

* Service upgrades are available; see Step 10, Hardware and Software Supplemental Services

† Windows NT language specific media kit is **mandatory** for non-North American variants; see Step 7.

Step 1—AlphaServer 800 5/33 Pedestal and Rackmount Systems

AlphaServer 800 5/333 Pedestal Packaged Systems								
Order Number	Operating System	O/S Media	Power cord	Keyboard	Memory	Disk	Graphics	Monitor
PB80B-AA	Windows NT	FIS	120 V	Included	64 MB	2.1 GB	Included	Required
PB80B-AB	Windows NT	Mandatory*	Mandatory	Required	64 MB	2.1 GB	Included	Required
PB80B-AC	Windows NT	FIS	120 V	Included	128 MB	2.1 GB	Included	Required
PB80B-AD	Windows NT	Mandatory*	Mandatory	Required	128 MB	2.1 GB	Included	Required
PB80B-FA	DIGITAL UNIX	FIS	120 V	Included	64 MB	2.1 GB	Included	Required
PB80B-FB	DIGITAL UNIX	FIS	Mandatory	Required	64 MB	2.1 GB	Included	Required
PB80B-FC	DIGITAL UNIX	FIS	120 V	Included	128 MB	2.1 GB	Included	Required
PB80B-FD	DIGITAL UNIX	FIS	Mandatory	Required	128 MB	2.1 GB	Included	Required
PB80B-MA	Open VMS	FIS	120 V	Included	64 MB	2.1 GB	Included	Required
PB80B-MB	Open VMS	FIS	Mandatory	Required	64 MB	2.1 GB	Included	Required
PB80B-MC	Open VMS	FIS	120 V	Included	128 MB	2.1 GB	Included	Required
PB80B-MD	Open VMS	FIS	Mandatory	Required	128 MB	2.1 GB	Included	Required

AlphaServer 800 5/333 Rackmount Packaged Systems								
Order Number	Operating System	O/S Media	Power cord	Keyboard	Memory	Disk	Graphics	Monitor
PB80P-AA	Windows NT	FIS	120 V	Included	64 MB	2.1 GB	Included	Required
PB80P-AB	Windows NT	Mandatory*	Mandatory	Required	64 MB	2.1 GB	Included	Required
PB80P-AC	Windows NT	FIS	120 V	Included	128 MB	2.1 GB	Included	Required
PB80P-AD	Windows NT	Mandatory*	Mandatory	Required	128 MB	2.1 GB	Included	Required
PB80P-FA	DIGITAL UNIX	FIS	120 V	Included	64 MB	2.1 GB	Included	Required
PB80P-FB	DIGITAL UNIX	FIS	Mandatory	Recommended	64 MB	2.1 GB	Included	Required
PB80P-FC	DIGITAL UNIX	FIS	120 V	Included	128 MB	2.1 GB	Included	Required
PB80P-FD	DIGITAL UNIX	FIS	Mandatory	Recommended	128 MB	2.1 GB	Included	Required
PB80P-MA	Open VMS	FIS	120 V	Included	64 MB	2.1 GB	Included	Required
PB80P-MB	Open VMS	FIS	Mandatory	Recommended	64 MB	2.1 GB	Included	Required
PB80P-MC	Open VMS	FIS	120 V	Included	128 MB	2.1 GB	Included	Required
PB80P-MD	OpenVMS	FIS	Mandatory	Recommended	128 MB	2.1 GB	Included	Required

* Includes Factory Installed Windows NT Server 4.0, English. Selection of Windows NT Server license and language specific media kit is **mandatory**.

Key: Mandatory items **must** be on purchase order at initial order acceptance
 Required items are essential for full system operation
 Recommended items enhance system functionality
 FIS = Factory Installed Software

Step 1—AlphaServer 800 5/400 Pedestal and Rackmount Systems

AlphaServer 5/400 Pedestal Packaged Systems								
Order Number	Operating System	O/S Media	Power cord	Keyboard	Memory	Disk	Graphics	Monitor
PB81B-AA	Windows NT	FIS	120 V	Included	64 MB	2.1 GB	Included	Required
PB81B-AB	Windows NT	Mandatory*	Mandatory	Required	64 MB	2.1 GB	Included	Required
PB81B-AC	Windows NT	FIS	120 V	Included	128 MB	2.1 GB	Included	Required
PB81B-AD	Windows NT	Mandatory*	Mandatory	Required	128 MB	2.1 GB	Included	Required
PB81B-AE	Windows NT	FIS	120 V	Included	256 MB	2.1 GB	Included	Required
PB81B-AF	Windows NT	Mandatory*	Mandatory	Required	256 MB	2.1 GB	Included	Required
PB81B-FA	DIGITAL UNIX	FIS	120 V	Included	64 MB	2.1 GB	Included	Recommended
PB81B-FB	DIGITAL UNIX	FIS	Mandatory	Recommended	64 MB	2.1 GB	Included	Recommended
PB81B-FC	DIGITAL UNIX	FIS	120 V	Included	128 MB	2.1 GB	Included	Recommended
PB81B-FD	DIGITAL UNIX	FIS	Mandatory	Recommended	128 MB	2.1 GB	Included	Recommended
PB81B-FE	DIGITAL UNIX	FIS	120 V	Included	256 MB	2.1 GB	Included	Recommended
PB81B-FF	DIGITAL UNIX	FIS	Mandatory	Recommended	256 MB	2.1 GB	Included	Recommended
PB81B-MA	Open VMS	FIS	120 V	Included	64 MB	2.1 GB	Included	Recommended
PB81B-MB	Open VMS	FIS	Mandatory	Recommended	64 MB	2.1 GB	Included	Recommended
PB81B-MC	Open VMS	FIS	120 V	Included	128 MB	2.1 GB	Included	Recommended
PB81B-MD	Open VMS	FIS	Mandatory	Recommended	128 MB	2.1 GB	Included	Recommended
PB81B-ME	Open VMS	FIS	120 V	Included	256 MB	2.1 GB	Included	Recommended
PB81B-MF	Open VMS	FIS	Mandatory	Recommended	256 MB	2.1 GB	Included	Recommended

AlphaServer 800 5/400 Rackmount Packaged systems								
Order Number	Operating System	O/S Media	Power cord	Keyboard	Memory	Disk	Graphics	Monitor
PB81P-AA	Windows NT	FIS	120 V	Included	64 MB	2.1 GB	Included	Required
PB81P-AB	Windows NT	Mandatory*	Mandatory	Required	64 MB	2.1 GB	Included	Required
PB81P-AC	Windows NT	FIS	120 V	Included	128 MB	2.1 GB	Included	Required
PB81P-AD	Windows NT	Mandatory*	Mandatory	Required	128 MB	2.1 GB	Included	Required
PB81P-AE	Windows NT	FIS	120 V	Included	256 MB	2.1 GB	Included	Required
PB81P-AF	Windows NT	Mandatory*	Mandatory	Required	256 MB	2.1 GB	Included	Required
PB81P-FA	DIGITAL UNIX	FIS	120 V	Included	64 MB	2.1 GB	Included	Recommended
PB81P-FB	DIGITAL UNIX	FIS	Mandatory	Recommended	64 MB	2.1 GB	Included	Recommended
PB81P-FC	DIGITAL UNIX	FIS	120 V	Included	128 MB	2.1 GB	Included	Recommended
PB81P-FD	DIGITAL UNIX	FIS	Mandatory	Recommended	128 MB	2.1 GB	Included	Recommended
PB81P-FE	DIGITAL UNIX	FIS	120 V	Included	256 MB	2.1 GB	Included	Recommended
PB81P-FF	DIGITAL UNIX	FIS	Mandatory	Recommended	256 MB	2.1 GB	Included	Recommended
PB81P-MA	Open VMS	FIS	120 V	Included	64 MB	2.1 GB	Included	Recommended
PB81P-MB	Open VMS	FIS	Mandatory	Recommended	64 MB	2.1 GB	Included	Recommended
PB81P-MC	Open VMS	FIS	120 V	Included	128 MB	2.1 GB	Included	Recommended
PB81P-MD	Open VMS	FIS	Mandatory	Recommended	128 MB	2.1 GB	Included	Recommended
PB81P-ME	Open VMS	FIS	120 V	Included	256 MB	2.1 GB	Included	Recommended
PB81P-MF	Open VMS	FIS	Mandatory	Recommended	256 MB	2.1 GB	Included	Recommended

* Includes Factory Installed Windows NT Server 4.0, English. Selection of Windows NT Server license and language specific media kit is **mandatory**.

Key: Mandatory items **must** be on purchase order at initial order acceptance
 Required items are essential for full system operation
 Recommended items enhance system functionality
 FIS = Factory Installed Software

Step 2—Memory

- .. Packaged Systems include one 64 MB, 128 MB or 256 MB memory option.
- .. System supports one addition memory option for a maximum of two memory options supported per AlphaServer 800 system. Memory options include industry-standard EDO DIMMs with ECC support.
- .. System maximum of 1 GB memory

PB8MA-AB	32 MB 70ns (4 x 8 MB DIMMs) memory option
PB8MA-AC	64 MB 70ns (4 x 16 MB DIMMs) memory option
PB8MA-AD	128 MB 70ns (4 x 32 MB DIMMs) memory option
PB8MA-AE	256 MB 70ns (4 x 64 MB DIMMs) memory option
PB8MA-AF	512 MB 70ns (4 x 128 MB DIMMs) memory option

Step 2a—Prestoserve Non-Volatile Random Access Memory (NVRAM)

- .. Supported on DIGITAL UNIX systems **only**, maximum one Prestoserve option per system.

DJ-ML200-BA	PCI-based 4 MB PrestoServe I/O performance enhancement option
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Step 3—Monitors

- .. Windows NT systems **require** a graphics monitor to run all functions.
- .. Graphics monitors other than those listed below can be used if compatible with SVGA graphics included with system.

Note: Higher resolution available with optional EISA or PCI graphics adapters (see Step 5).

VRC15-WA/W3/W4	15" (13.9" viewable image size) high-resolution color monitor with Frost White enclosure. Flat square CRT with 0.28 mm dot pitch and anti-reflection, anti-glare, anti static coating. Auto-scanning from VGA to 1024 x 768 at 75 Hz NI refresh rates. MPR-II, Energy Star, DPMS and NUTEK compliant. 120/240V universal power supply. Includes 1.4 meter HD15 male to male video cable. -WA for Northern Hemisphere monitor with 120V power cord. -W3 for Northern Hemisphere monitor without power cord. -W4 for Southern Hemisphere monitor without power cord; select country specific power cords for -W3 and -W4 variants.
VRTX7-WA/W3 VRT17-W4	17" (16.0" viewable image size) professional series auto-scanning color monitor, Trinitron CRT, 0.25 mm aperture grill pitch, VGA to 1280 x 1024 at 75 Hz, TCO 92, MPR-II, Energy Star, HD15 male to male video cable. -WA = Northern Hemisphere with 120V power cord. -W3 = Northern Hemisphere without power cord. -W4 = Southern Hemisphere without power cord. Select country specific power cord for -W3 and -W4 variants.
VRCX1-WA/W3/W4	21" (19.7" viewable image size) auto-scanning color monitor, 0.28 Dot Pitch, VGA to 1600 x 1200 at 75 Hz NI, TCO 92, Energy Star, includes video cable. -WA = Northern Hemisphere with 120 V power cord. -W3 = Northern Hemisphere without power cord. W4 = Southern Hemisphere without power cord. Select country specific power cord for W3 and W4 variants.

Step 4—Storage

Configuration rules for Pedestal and Rackmount Storage

- .. Integral Fast Wide Single Ended (FWSE) SCSI-2 controller supports a maximum of seven wide devices.
 - Three 5.25 inch half-height removable media devices or One 5.25 inch half-height and one 5.25 full-height removable media devices.
 - Four internal hot-swappable SCSI SCA2 hard drives
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-

Step 4a—Internal Storage

- .. Pedestal and Rackmount Packaged systems include:
 - One CD-ROM drive
 - One 2.1 GB SCSI SCA2 wide hard drive
 - 1.44 MB diskette drive in dedicated slot.

Step 4a—Internal Storage (continued)**Removable Media Devices**

RRD46-AB	600 MB 5.25 inch half-height 12X CD-ROM drive
PBXTZ-AA	2.0 GB 5.25 inch half-height SCSI QIC tape drive (TZK11)
TLZ09-LK	8.0 GB 5.25 inch x 1.6-inch SCSI 4 mm DAT drive
TLZ9L-LG	32/64 GB 5.25 inch full-height DAT loader

System Hard Disk Drives

Pedestal and Rackmount Packaged systems include one 2.1 GB SCSI SCA2 hard disk drive (RZ28M-SB)

RZ26N-SB	1.05 GB 16-bit wide 5400 RPM 3.5 x 1" SCSI SCA2 hard disk drive
RZ28M-SB	2.1 GB 16-bit wide 5400 RPM 3.5 x 1" SCSI SCA2 hard disk drive
RZ1BB-SB	2.1 GB 16-bit wide 7200 RPM 3.5 x 1": SCSI SCA2 hard disk drive
RZ1CB-SB	4.3 GB 16-bit wide 7200 RPM 3.5 x 1": SCSI SCA2 hard disk drive
RZ1DB-SB	9.0 GB 16-bit wide 7200 RPM 3.5 x 1.6": SCSI SCA2 hard disk drive

Internal SCSI Cable Kits

PB8HA-DA	Includes 68-pin SCSI cable, connects 16-bit wide SCSI controller to internal storage assembly Example—connects KZPAC-xx PCI RAID controller to internal AlphaServer 800 storage assembly, maximum one per system.
BC25V-1H	Includes 68-pin SCSI cable, connects 16-bit wide SCSI Controller to bulkhead for external 16-bit wide SCSI expansion, maximum two per system

Step 4b—Storage Controllers

- .. Maximum four PCI-based KZPAC-xx SCSI controllers supported per system.
- .. Maximum three EISA-based KZESC-xx SCSI controllers supported per system. Maximum number of EISA-based controllers of all types is limited by the total number of available EISA slots and available IRQs.
- .. Maximum combination number of KZESC-xx and KZPAC-xx SCSI controllers supported is four.
- .. KZPAC-xx StorageWorks RAID Array 230/Plus includes PCI backplane RAID controller and StorageWorks RAID Array 230/Plus Subsystem family software and documentation kit for OpenVMS, DIGITAL UNIX and Windows NT.
 - KZPAC-AA one-port controller installed in system requires a PB8HA-DA SCSI cable kit for connection to internal storage assembly.
 - KZPAC-CA three-port controller installed in system requires one PB8HA-DA SCSI cable kit for connection to internal storage assembly, or one BC25V-1H cable kit for connection to external expansion port bulkhead.
- .. KZESC-xx StorageWorks RAID Array 200 includes EISA backplane RAID controller and StorageWorks RAID Array 200 Subsystem family software and documentation kit for OpenVMS, DIGITAL UNIX and Windows NT.
 - KZESC-AA/BA controllers support external disks only. Connection to the internal AlphaServer 800 Storage assembly is not supported.
 - KZESC-BA three-port controller installed in system requires two BC25V-1H cable kit for connection to external expansion port bulkhead.
- .. KZPSA-BB PCI-based one-port Fast Wide Differential SCSI controller supports externally connected wide devices in BA356/BA36R with DWZZB signal converter, or narrow disks in BA35R with DWZZA signal converter. Internal hard disk drives are not supported on FWD controller.
- .. SCSI cables are not included and must be ordered separately.
- .. External DSSI cables are not included and must be ordered separately.

SCSI Controllers

KZPAA-AA	PCI-based one-port high-performance Fast Narrow Single Ended (FNSE) SCSI-2 controller
KZPSA-BB	PCI-based one-port high-performance Fast Wide Differential (FWD) SCSI controller. Supports external disks only.
BN21K-02	Connects from KZPSA to DWZZA-VA in narrow StorageWorks enclosures and narrow StorageWorks Rackmount shelves, or DWZZB-VW in wide StorageWorks enclosures and wide StorageWorks Rackmount shelves.

Step 4b—Storage Controllers (continued)**SCSI Controllers**

KZPDA-AA	PCI-based one-port Fast Wide Single Ended (FWSE) SCSI controller
BN21K-02	Connects from KZPDA to wide StorageWorks enclosures and wide StorageWorks Rackmount shelves.
KZPAC-AA*	One-port PCI backplane RAID (FWSE) controller with 4 MB EDRAM cache; includes StorageWorks RAID Array 230/Plus Subsystem family software and documentation kit. System requires PB8HA-DA SCSI cable kit for connection to internal Storage assembly.
BN31S-1E	Connects from KZPAC-AA to wide StorageWorks enclosures and wide StorageWorks Rackmount shelves
KZPAC-CA*	Three-port PCI backplane RAID (FWSE) controller with 4 MB of EDRAM cache ; includes StorageWorks RAID Array 230/Plus Subsystem family software and documentation kit. System requires PB8HA-DA SCSI cable kit for connection to internal Storage assembly.
KZPAC-CB*	Save as above with 8 MB of EDRAM cache
BC25V-1H	SCSI cable assembly kit for connection to third port; uses one expansion bulkhead port, uses one PCI/ESIA bulkhead slot if three KZPAC-CA/CB are configured in system.
BN31S-1E	Connects from KZPAC-CA to wide StorageWorks enclosures and wide StorageWorks Rackmount shelves
KZPSC-UB	Battery backup for the KZPAC-xx.
KZESC-AA*	One-port EISA backplane RAID (FNSE) controller with 4 MB DRAM cache memory; includes StorageWorks RAID Array 200 Subsystem family software and documentation kit.
BN21H-02	Connects from KZPAA-AA to narrow StorageWorks enclosures and narrow StorageWorks Rackmount shelves
BN21N-02	Connects from KZESC-BA to wide StorageWorks enclosures and wide StorageWorks Rackmount shelves
KZESC-BA*	Three-port EISA backplane RAID (FNSE) controller with 4 MB DRAM cache memory ; includes StorageWorks RAID Array 200 Subsystem family software and documentation kit.
CK-SWXCR-AA	SCSI cable/bulkhead assembly kit for KZESC-BA, required for connecting second and third ports to bulkhead slot. Uses one PCI or EISA slot.
BN21H-02	Connects from KZESC-BA to narrow StorageWorks enclosures and wide StorageWorks Rackmount shelves
BN21N-02	Connects from KZESC-BA to wide StorageWorks enclosures and wide StorageWorks Rackmount shelves

* See *Storage Devices* for additional information on StorageWorks RAID Array 2x0 Subsystems and external StorageWorks expansion

DSSI Controllers

KFPSA-AA	PCI-based single-DSSI controller (OpenVMS systems only). See Step 4f DSSI cables.
KFESB-AA	EISA-based single-DSSI controller (OpenVMS systems only). Uses one EISA slot if system is end node in OpenVMS cluster, or two slots if system is middle node in OpenVMS cluster. Maximum two (if end node in cluster) or maximum of one (if middle node in cluster). See Step 4d DSSI cables.

Step 4c—External Tape Expansion

- .. External tape drives are also supported on optional PCI-based SCSI controllers.
 - KZPAA-AA—maximum bus length including cable and tape device cannot exceed 3.0 meters.
 - KZPSA-BB—maximum bus length including cable and tape device cannot exceed 25.0 meters.
- .. External tape drives are **not** supported on one-and three-port (KZESC-xx) Fast-SCSI-2 controllers.
- .. Each tabletop tape device **requires** high density 50-pin to low density 50-pin SCSI cable (BN23G-xx).

Step 4c—External Tape Expansion (continued)**External Tapes supported on Windows NT Servers**

TLZ09	4.0/8.0 GB 4 mm DAT tape drive
TLZ9L^{1,2}	32/64 GB 4 mm DAT autoloader
TZK11-DA	2.0 GB 5.25-inch tabletop QIC tape drive
TZ875²	100 GB, DLT tape autoloader
TZ877²	140 GB, DLT tape autoloader
BN23G-0E	3 Foot Molded SCSI Cable, required for each tabletop tape device

External Tapes supported on DIGITAL UNIX and OpenVMS servers

TLZ09	4.0/8.0 GB 4 mm DAT tape drive
TLZ9L^{1,2}	32/64 GB 4 mm DAT autoloader
TZK11-DA	2.0 GB 5.25-inch tabletop QIC tape drive
TKZ60-FA/HA	400 MB IBM 3480/3490 compatible tabletop tape drive
TKZ60-EA/GA	400 MB IBM 3480/3490 compatible tabletop tape drive
TKZ61-AA/AD	400 MB IBM compatible tape autoloader rackmountable
TKZ61-AC/AF	400 MB IBM compatible tape autoloader tabletop
TKZ62-AA/AD	2.4 GB IBM compatible tape autoloader rackmountable
TKZ62-AC/AF	2.4 GB IBM compatible tape autoloader tabletop
TSZ07-CA/FA	40/140 MB, reel/reel, tabletop tape drive
TSZ07-AA/DA	40/140 MB, reel/reel, tape drive rackmountable
TSZ07-BA/EA	40/140 MB, reel/reel, tape in a H9A10 cabinet
TZ877²	140 GB, DLT tape autoloader
TZ88²	20/40 GB, DLT tape drive
TZ887-NT	140/280 GB SCSI tape subsystem
TKZ9E-TA	2/5/7/10/14 GB 8 mm helical scan tape drive, tabletop
TKZ9E-VA	2/5/7/10/14 GB 8 mm helical scan tape drive in StorageWorks SBB carrier
BN23G-01	3 Foot Molded SCSI Cable, required for each tabletop tape device.

1 Includes four cartridge loader. Larger magazines are supported.

2 Base operating systems support sequential back-up mode only; additional software is required for random access backup. See *Storage Devices* for details.

Step 4d—DSSI Cables**.. KFESB-AA EISA-based DSSI controller cables:**

- KFESB to any external "Pin-Socket" DSSI connection (VAX 4000s, R400X) requires BC22Q-xx DSSI cable.
- KFESB to any external "Micro-Ribbon" DSSI straight connection (all other DSSI systems and storage devices requiring straight connection) requires BC21Q-xx DSSI cable.
- KFESB to any external "Micro-Ribbon" DSSI right-angle connection (all other DSSI systems and storage devices requiring right-angle connection) requires BC29S-xx DSSI cable.

.. KFPSA PCI-based DSSI controller cables:

- KFPSA to any external "Pin-Socket" DSSI connection requires BC22Q-xx
- KFPSA to any external "Micro-Ribbon" DSSI straight connection (all other DSSI systems and storage devices requiring straight connection) requires BC21Q-xx
- KFPSA to any external "Micro-Ribbon" DSSI right-angle connection (all other DSSI systems and storage devices requiring right-angle connection) requires BC29S-xx DSSI cable
- Order BC29S-09 DSSI cable for HSD10 in BA36R-Ax shelves
- Order BC29U-02 DSSI cable for HSD10 in adjacent BA36R-Ax shelves
- Order BC29V-06 DSSI cable for HSD10 in non-adjacent BA36R-Ax shelves

Step 5—Graphics Adapters

Note: Select only if additional graphics card is required.

- .. All systems include onboard SVGA with 1 MB Video Ram.
- .. Maximum of one PB2GA-JD supported per system. Onboard SVGA must be disabled.
- .. Maximum four PBXGB-AA/CA supported on DIGITAL UNIX systems
Maximum one PBXGB-AA/CA supported on OpenVMS and Windows NT. Onboard SVGA must be disabled.

PB2GA-JD	PCI-based 2-MB DRAM graphics adapter (DIGITAL UNIX, OpenVMS, Windows NT)
PBXGB-AA	PCI-based 8-plane 1280 x 1024 graphics adapter (DIGITAL UNIX, OpenVMS, Windows NT)
PBXGB-CA	PCI-based 24-plane 1280 x 1024 x 1024 graphics adapter (Digital UNIX, OpenVMS, Windows NT)

Step 6—Networks and Communications

- .. Packaged systems include PCI-based Fast 100 Ethernet (Twisted Pair) controller (DE500-AA), uses one PCI slot.
- .. Select networking cable for Ethernet controller
 - BN25G-03/04/07 for 10BaseT (twisted pair)
- .. Maximum number of **each** EISA-based network controllers supported per system:
 - Three DE425-AA, Three DW300-AA, Three DNSES

DE500-AA	PCI-based Fast Ethernet network interface card
DE450-CA	PCI-based DIGITAL Etherworks 32-bit network interface card (twisted pair, Thick wire, ThinWire)
DEFPA-AB	PCI-based DEC FDDIcontroller, Single Attachment; maximum four, OpenVMS, Windows NT, DIGITAL UNIX
DEFPA-DB	PCI-based DEC FDDIcontroller, Dual Attachment, maximum four, OpenVMS, Windows NT, DIGITAL UNIX
DEFPA-UB	PCI-based DEC FDDI (UTP) controller; maximum four, OpenVMS, Windows NT, DIGITAL UNIX
DGLPB-AB	PCI-based ATMworks 350 adapter, DIGITAL UNIX only
PBXDP-AA	PCI-based , 2-port, synchronous communications controller, maximum four, OpenVMS, Windows NT
PBXDP-AB	PCI-based , 4-port, synchronous communications controller, maximum four, OpenVMS, Windows NT
PBXDP-AC	PCI-based , 8-port, synchronous communications controller, maximum four, OpenVMS, Windows NT
PBXNP-AA	PCI-based Token-Ring, DIGITAL UNIX, OpenVMS
PBXDA-AA	PCI-based Async MUX Adapter, 4 lines, DIGITAL UNIX, Windows NT
PBXDA-AB	PCI-based Async MUX Adapter, 8 lines, DIGITAL UNIX, Windows NT
DE425-AA	EISA-based Ethernet, OpenVMS and DIGITAL UNIX only
DW300-AA	EISA-based Token-Ring adapter includes NetWare V2.15 driver, LAN Manager Driver, and documentation (Not supported by DECnet/OSI for OpenVMS)
DNSES-AA	EISA-based synchronous communications controller; DIGITAL UNIX, OpenVMS
CXI01-AA	ISA Async MUX Adapter, 16 lines—expandable to 64 lines; DIGITAL UNIX, Windows NT
CXI01-AD	ISA Async MUX Adapter, 16 lines—expandable to 224 lines; DIGITAL UNIX, Windows NT
CXI01-AB	Asynchronous 16 Port XEM expansion for CXI01-AA/AD
CXI01-AC	Asynchronous MUX cable converter (RJ45-DB25)
CXI01-AE	Asynchronous 16 Port EPC expansion for CXI01-AD, Maximum supported is four
CXI01-AF	Asynchronous MUX adapter (RJ45-MJ11), 8 pack
DIIAA-AA	ISA-based ISDN terminal adapter (U.S.), maximum one, Windows NT
DIIAA-AB	ISA-based ISDN terminal adapter (non-U.S.), maximum one, Windows NT

Step 6—Networks and Communications (*continued*)

Video and Sound Options

AV301-AA	PCI-based, Full Video Supreme, maximum one, DIGITAL UNIX, OpenVMS
AV301-AN	PCI-based, Full Video Supreme, maximum one, Windows NT
AV321-AA	PCI-based, Full Video Supreme JPEG, maximum one, DIGITAL UNIX, OpenVMS, Windows NT
AVA01-AA	ISA-based, Sound Card, head phones and microphone, maximum one, DIGITAL UNIX, OpenVMS, Windows NT

Step 7—Software

- .. North American variants of Windows NT Packaged systems include Windows NT license, media (CD-ROM) kits (see Step 1). **Note:** Selection of language specific Windows NT media kit is **mandatory** for non North American variants.

Windows NT Server plus 10-client access license, media (CD-ROM) kits

QB-23CAA-SB	Windows NT Server license, media kit North American English
QB-23C8A-SB	Windows NT Server license, media kit International English
QB-23CPA-SB	Windows NT Server license, media kit French
QB-23CGA-SB	Windows NT Server license, media kit German
QB-23CSA-SB	Windows NT Server license, media kit Spanish
QB-23CUA-SB	Windows NT Server license, media kit Italian
QB-23CJA-SB	Windows NT Server license, media kit Japanese
QB-23CTA-SB	Windows NT Server license, media kit Hebrew
QB-23CMA-SB	Windows NT Server license, media kit Swedish
QB-23CQA-SB	Windows NT Server license, media kit Arabic
QB-23C5A-SB	Windows NT Server license, media kit Thai
QB-23CHA-SB	Windows NT Server license, media kit Dutch
QB-23CVA-SB	Windows NT Server license, media kit Brazilian/Portuguese
QB-23C4A-SB	Windows NT Server license, media kit Korean
QB-23C3A-SB	Windows NT Server license, media kit Taiwanese
QB-23C2A-SB	Windows NT Server license, media kit PRC Chinese

Windows NT Server Optional software and documentation

QB-53V9A-SA	Windows NT Server Cluster Kit
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DIGITAL UNIX

Software Processor Code = E

- .. DIGITAL UNIX Packaged systems **include** Traditional Unlimited User license.
- .. DIGITAL UNIX Packaged systems require operating system media and documentation for first system on site.

DIGITAL UNIX Media and Documentation—required for first system on site

QA-MT4AA-H8	DIGITAL UNIX media and on-line documentation on CD-ROM
QA-MT4AA-GZ	DIGITAL UNIX full hardcopy documentation

DIGITAL UNIX Layered Products CD-ROM

QA-054AA-H8	Layered products media and documentation for DIGITAL UNIX on CD-ROM
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DIGITAL UNIX ASE

QL-05SAE-AA	DIGITAL UNIX Cluster license
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Step 7—Software

DECnet for DIGITAL UNIX

QL-MTJAE-AA	DECnet/OSI end-system license for DIGITAL UNIX
QL-MTKAE-AA	DECnet/OSI extended function license for DIGITAL UNIX

OpenVMS

Software Processor Code = E

OpenVMS Concurrent Use Licenses are **not** specific to a single system and can be moved between systems at user discretion. OpenVMS Concurrent Use Licenses can also be shared in a mixed OpenVMS VAX and OpenVMS Alpha Cluster.

OpenVMS Concurrent Use Licenses

QL-MT3AA-3B	OpenVMS Concurrent Use 1-user license
QL-MT3AA-3C	OpenVMS Concurrent Use 2-user license
QL-MT3AA-3D	OpenVMS Concurrent Use 4-user license
QL-MT3AA-3E	OpenVMS Concurrent Use 8-user license
QL-MT3AA-3F	OpenVMS Concurrent Use 16-user license
QL-MT3AA-3G	OpenVMS Concurrent Use 32-user license
QL-MT3AA-3H	OpenVMS Concurrent Use 64-user license
QL-MT3AA-3J	OpenVMS Concurrent Use 128-user license
QL-MT3AA-3K	OpenVMS Concurrent Use 256-user license
QL-MT2AE-AA	OpenVMS Traditional unlimited user license

OpenVMS Media and Documentation - required for first system on site

QA-MT1AA-H8	OpenVMS media and on-line documentation CD-ROM
QA-001AA-GZ	OpenVMS hardcopy documentation

OpenVMS Layered Products CD-ROM

QA-03XAA-H8*	Layered products media and documentation for OpenVMS on CD-ROM
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* Includes DIGITAL Enterprise Integration Server for OpenVMS media and documentation

DIGITAL Enterprise Integration Package

QA-5LVAA-H8	DIGITAL Enterprise Integration Server for OpenVMS media and documentation
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DECnet for OpenVMS

QL-MTGAE-AA	DECnet extended function license for OpenVMS
QL-MTHAE-AA	DECnet end-system to extended function upgrade license for OpenVMS

DSSI Information

EK-410AB-MG	DSSI VMScluster Installation Guide
EK-D4AXP-TS	DSSI VMScluster Troubleshooting Guide

Step 8—Power Cords, Keyboards, and Miscellaneous

Pedestal and Monitor Power Cords

- .. North American variants include BN27Y-1J 120 V (North American, Japan) power cord. If another power cord is selected, both power cords ship with system.
- .. For non-North American system variants, selection of a power cord is mandatory.

BN27Y-1J	North American, Japan, 120 V, 75-inches long
BN19H-2E	Australia, New Zealand, 2.5 meters long
BN19C-2E	Central Europe, 2.5 meters long
BN19A-2E	UK, Ireland, 2.5 meters long
BN19E-2E	Switzerland, 2.5 meters long
BN19K-2E	Denmark, 2.5 meters long
BN19M-2E	Italy, 2.5 meters long
BN19S-2E	Egypt, India, South Africa, 2.5 meters long
BN18L-2E	Israel, 2.5 meters long

Rackmount Power Cords

- .. North American variants include BN20Z-4E 120 V (North American, Japan) power cord. If another power cord is selected, both power cords ship with system.
- .. For non-North American system variants, selection of a power cord is mandatory.

Note: AlphaServer 800 Pedestal system power cords are less than 15-feet long and are **not** supported in cabinet enclosures.

BN20Q-4E	15-feet 240 V, North American, 50Hz power cord connects system to power distribution unit located inside cabinet
BN20Z-4E	15-feet 120 V, 60Hz power cord connects system to power distribution unit located inside cabinet

Keyboards

- .. Some variants include a keyboard (see Step 1). For these variants, if an additional keyboard is ordered, both keyboards ship with system.

104/105 key PC style keyboard		Language	108 key VT style keyboard	
Windows NT	DIGITAL UNIX		OpenVMS	DIGITAL UNIX
LK97w-A2	LK97w-A2	U.S./English	LK46w-A2	LK46w-A2
LK97w-AB	LK97w-AB	Belgian	LK46w-AB	LK46w-AB
LK97w-AC	LK97w-AC	Canadian/French	LK46w-AC	LK46w-AC
LK97w-AD	LK97w-AD	Danish	LK46w-AD	LK46w-AD
LK97w-AE	LK97w-AE	United Kingdom	LK46w-A2	LK46w-A2
LK97w-AF	LK97w-AF	Finnish	LK46w-AF	LK46w-AF
LK97w-AG	LK97w-AG	German	LK46w-AG	LK46w-AG
LK97w-AH	LK97w-AH	Dutch	LK46w-AH	LK46w-AH
LK97w-AI	LK97w-AI	Italian	LK46w-AI	LK46w-AI
LK97w-AJ	LK97w-AJ	Japan		
		Swiss/French	LK46w-AK	LK46w-AK
		Swiss/German	LK46w-AL	LK46w-AL
LK97w-AK	LK97w-AK	Swiss/Generic		
LK97w-AM	LK97w-AM	Swedish	LK46w-AM	LK46w-AM
LK97w-AN	LK97w-AN	Norwegian	LK46w-AN	LK46w-AN
LK97w-AP	LK97w-AP	French	LK46w-AP	LK46w-AP
		Canadian/English		LK46w-AQ
LK97w-AR	LK97w-AR	Lat. America		

Step 8—Power Cords, Keyboards, and Miscellaneous *(continued)*
Keyboards

104/105 key PC style keyboard		Language	108 key VT style keyboard	
Windows NT	DIGITAL UNIX		OpenVMS	DIGITAL UNIX
LK97w-AS	LK97w-AS	Spanish	LK46w-AS	LK46w-AS
LK97w-AV	LK97w-AV	Portuguese	LK46w-AV	LK46w-AV
LK97w-BH	LK97w-BH	Greek	LK46w-BH	LK46w-BH
LK97w-AT	LK97w-AT	Hebrew	LK46w-AT	LK46w-AT
LK97w-BI	LK97w-BI	Taiwanese		
LK97w-BP	LK97w-BP	Polish	LK46w-BP	LK46w-BP
LK97w-BQ	LK97w-BQ	Hungarian	LK46w-BQ	LK46w-BQ
LK97w-CZ	LK97w-CZ	Slovak	LK46w-CZ	LK46w-CZ
LK97w-BY	LK97w-BY	Serbian		
LK97w-CB	LK97w-CB	Thai		
LK97w-CQ	LK97w-CQ	Icelandic		
LK97w-BV	LK97w-BV	Czech	LK46w-BV	LK46w-BV
LK97w-BR	LK97w-BR	Arabic		
LK97w-BU	LK97w-BU	Turkish Q		
LK97w-BW	LK97w-BW	Turkish F	LK46w-BW	LK46w-BW
LK97w-BT	LK97w-BT	Cyrillic		

Air Filter Option

PB8HA-CA Pedestal Air filter, placed in front of fixed storage disk area.

Pedestal to Rackmount Conversion kit

PB8HA-BA AlphaServer 800 Pedestal to Rackmount conversion kit. Includes bezel, slide rails and mounting hardware necessary for mounting system in any cabinet equipped with industry-standard RETMA or METRIC rails. Rackmount power cords must be ordered separately.

Mouse and Extension Cable Kit

PBXWS-WA 3-button mouse (included with all systems, order as spare or replacement)

2T-450KM-AA Extension cable kit for VGA, PC style keyboard, and mouse, for use with Rackmount systems.

Step 9—Cabinet Enclosure

Select cabinet enclosure for Packaged AlphaServer 800 Rackmount systems, if required.

Note: For integration of an AlphaServer 800 Rackmount system into a DIGITAL Cabinet, call Computer Special Systems (CSS) 1-800-DIGITAL.

The color of cabinets listed is Digital 277 Blue-Gray.

.. H9A10 19-inch EIA Cabinet Enclosure Dimensions

- Outside: 66.9-inches high, 23.62-inches wide, 33.8-inches deep
- Internal usable rackmountable space: 56-inches high, 19-inches wide, 30.8-inches deep
- An H9A10 cabinet with two H7600 power controllers can support a maximum of six AlphaServer 800 Rackmount systems.

.. H9A15 19-inch EIA cabinet Enclosure Dimensions

- Outside: 78.7-inches high, 23.62-inches wide, 33.4-inches deep
- Internal usable rackmountable space: 68.25-inches high, 19-inches wide, 29.8-inches deep
- An H9A15 cabinet with two H7600 power controllers can supported a maximum of six AlphaServer 800 Rackmount systems.

Step 9—Cabinet Enclosure (continued)

- .. H9A11 19-inch EIA Cabinet Enclosure Dimensions
 - Outside: 43.3-inches high, 33.8-inches wide, 30.8-inches deep
 - Internal usable rackmountable space: 35-inches high, 19-inches wide, 30.8 inches
 - An H9A11 cabinet with one H7600 power controller can support a maximum of three AlphaServer 800 Rackmount systems.
- .. Cabinet Power Plugs
 - 120v Cabinets have one or two L5-30P plugs
 - 240v Cabinets have one or two IEC pin and sleeve 316 P6 plugs

H9A10-RL	120V EIA Cabinet assembly, with two power controller, rear swing door
H9A10-RT	240V EIA Cabinet assembly, with two power controller, rear swing door
H9A10-EJ	120V EIA Cabinet assembly, with two power controller, front and rear swing door
H9A10-EK	240V EIA Cabinet assembly, with two power controller, front and rear swing door
H9A15-RA	120V EIA Cabinet assembly, with two power controllers, rear swing door
H9A15-RG	240V EIA Cabinet assembly, with two power controllers, rear swing door
H9A15-RE	EIA Cabinet assembly, no power, rear swing door
H9A11-RA	120V EIA Cabinet assembly, with one power controller, lift-off rear door
H9A11-RG	240V EIA Cabinet assembly, with one power controller, lift-off rear door

Step 10—Hardware and Software Supplemental Support Services
Hardware—Americas and Asia Pacific only

- .. Systems include three-year hardware warranty, on-site with 5 x 9, 24-hour response time.
- .. Select optional Hardware Supplemental Support Services if required.
- .. Select optional Hardware Installation.

FM-MK4HR-36	5 x 9, 4-hour response time
FM-MK512-36	5 x 12, 4-hour response time
FM-MK616-36	6 x 16, 4-hour response time
FM-MK724-36	7 x 24, 4-hour response time
FM-MKXHW-60	Years 1-5, next day, Onsite
FM-MK4HR-60	Years 1-5, 5x9, 4-hour response time
FM-MK512-60	Years 1-5, 5x12, 4-hour response time
FM-MK616-60	Years 1-5, 6x16, 4-hour response time
FM-MK724-60	Years 1-5, 7x24, 4-hour response time
FM-24INT-IN	Hardware Installation

Software—Americas and Asia Pacific only

- .. DIGITAL UNIX and OpenVMS systems include 90-day Conformance to SPD and Telephone Advisory Support. Select optional Software Supplemental Support Services, if required.
- .. Warranty on Microsoft's Windows NT Server 4.0 is conformance to the written material accompanying the software for a period of 90 days.
- .. Software service upgrades for Windows NT include advisory and remedial software support for the time period indicated.

FM-WNT03-12	12-month Software Supplemental Support for Windows NT AlphaServer 800 systems
FM-WNT03-36	36-month Software Supplemental Support for Windows NT AlphaServer 800 systems
FM-WNT03-60	60-month Software Supplemental Support for Windows NT AlphaServer 800 systems

Step 10—Hardware and Software Supplemental Support Services (*continued*)**Software—Americas and Asia Pacific only**

FM-80BUS-12	12-month Full Software Supplemental Support for DIGITAL UNIX AlphaServer 800 systems
FM-80BUS-36	36-month Full Software Supplemental Support for DIGITAL UNIX AlphaServer 800 systems
FM-80BUS-60	60-month Full Software Supplemental Support for DIGITAL UNIX AlphaServer 800 systems
FM-80BUN-12	12-month Node Software Supplemental Support for DIGITAL UNIX AlphaServer 800 systems
FM-80BUN-36	36-month Node Software Supplemental Support for DIGITAL UNIX AlphaServer 800 systems
FM-80BUN-60	60-month Node Software Supplemental Support for DIGITAL UNIX AlphaServer 800 systems
FM-80BVS-12	12-month Software Supplemental Support for OpenVMS AlphaServer 800 systems
FM-80BVS-36	36-month Software Supplemental Support for OpenVMS AlphaServer 800 systems
FM-80BVS-60	60-month Software Supplemental Support for OpenVMS AlphaServer 800 systems
FM-80BVN-12	12-month Node Software Supplemental Support for OpenVMS AlphaServer 800 systems
FM-80BVN-36	36-month Node Software Supplemental Support for OpenVMS AlphaServer 800 systems
FM-80BVN-60	60-month Node Software Supplemental Support for OpenVMS AlphaServer 800 systems

Step 10a—Hardware and Software Supplemental Support Services (Europe only)

Europe does **not** have specific part numbers for Hardware and Software Supplemental Support Services. Prices can be quoted using the Excelerator tool; contact MCS Sales in your country for information on Hardware and Software Supplemental Support Services.

AlphaServer 800 Pedestal and Rackmount

AlphaServer 800 Pedestal System Specifications

Shipping Dimension		
Height	47 cm (18.5 in.)	
Width	60 cm (23.6 in.)	
Depth	77.5 cm (30.5 in.)	
Weight	33 kg (73 LB) typical 37 kg (82 LB) maximum	
Installed Dimensions		
Height	45 cm (17.1 in.)	
Width	22.6 cm (8.9 in.)	
Depth	65.8 cm (25.9 in.)	
Weight	24.5 kg (54 LB) typical 28 kg (62 LB) maximum	
Clearances	Operating	Service
Front	75 cm (29.5 in.)	75 cm (29.5 in.)
Rear	15 cm (5.9 in.)	75 cm (29.5 in.)
Left side	None	75 cm (29.5 in.)
Right side	None	5 cm (2 in.)
Environmental		
Temperature	Operating*	10–40° C (50–104° F)
	Nonoperating	Not tested
	Storage (60 days)	-40–66° C (-40–151° F)
	Rate of change	11° C/hr (20° F/hr)
Relative humidity	Operating	20–80%
	Nonoperating	20–80%
	Storage (60 days)	10–95%
	Rate of change	20%/hr
Maximum wet bulb temperature	Operating	28° C (82° F)
	Storage (60 days)	46° C (115° F)
Minimum dew point temperature	Operating	2° C (36° F)
	Storage (60 days)	Not tested
Maximum heat dissipation	380 Watt 1297 Btu/hr	
Air flow and quality	Intake location	Front
	Exhaust location	Rear
	Particle size	N/A
	Concentration	N/A
Altitude	Operating [†]	3097 m (10,000 ft)
	Nonoperating	12190 m (40,000 ft)
Mechanical shock	Operating	7.5 G 10 ms
	Nonoperating	20 G peak 30 ms
Vibration	Operating	10-500 Hz .1 G peak
Acoustics	Operating	LNPEc (BELs) 6.0 MAX per ISO 7779
Electrical—Power Supplies are universal 120/240 Vac		
Nominal ac voltage	100-120 Vac	220-240 Vac
Operating Voltage range	90-128 Vac	180-256 Vac
Power source phase	Single	Single
Nominal frequency	60 Hz	50 Hz
Frequency range	59-61 Hz	49-52 Hz
RMS current at nominal voltage (steady state)		
Maximum Power Consumption (Watts)	7.0 Amps 380 Watts	3.0 Amps
Power cord	Type	IEC 320 C13
	Length	190 cm (75 in.)
	U.S. plug	NEMA 5-15

* Maximum operating temperature at Sea Level. Reduce by 1 C (1.8 F) for each 600 m (2000 ft) above Sea Level.

† Higher altitudes are possible if maximum operating temperature is reduced (see Temperature, above); other restrictions may apply, such as maximum permissible altitude for hard drives.

AlphaServer 800 Pedestal and Rackmount

AlphaServer 800 Pedestal System Specifications *(continued)*

Regulatory	
Agency approvals	UL Listed to UL1950 (3 rd edition) CSA Certified to CAN/CSA-C22.2 No. 950-M95 TUV EN 60950 GS marked CB Certification pending FCC (Class B) Part 15, Subpart B (CFR 54,1995) EMC Directive 89/336/EEC EN 55022:1994 Class B EN 50082-1 1992 Light Industrial CE Class B VCCI Class II ITE AS/NZS 3548:1992 (Class B)
Reviewed to	AS 3260:1993 Australian/New Zealand Standard EN 60 950: 1995 European Norm IEC 950

AlphaServer 800 Rackmount System Specifications

Shipping Dimension	
Same as Pedestal	
Installed Dimensions	
Height	22 cm (8.6 in.) fits 8.75 in. [5U] standard EIA 310D
Width	standard EIA 310D (RETMA)
Depth	63.8 cm (25.1 in.)
Weight	24.5 kg (54 LB) typical 28 kg (62LB) maximum
Clearances	Service
Front	See requirements of specific cabinet
Rear	Slides forward 68.6 cm (27 in.)
Sides	then accessible from the top
Environmental	
Temperature	
Operating	10–35° C (50–95° F)
Nonoperating	Not tested
Storage (60 days)	-40–66° C (-40–151° F) 11 c/hr (20 F/HR)
Relative humidity	
Operating	20–80%
Nonoperating	20–80%
Storage (60 days)	10–95%
Rate of change	20%/hr
Air flow and quality	
Intake location	Front
Exhaust location	Rear
Electrical—Power Supplies are universal 120/240 Vac	
Same as Pedestal	
Regulatory	
Same as Pedestal	

Uninterruptable Power Supplies

Prestige 1250EXT

UPS offerings include EIA232 port for local or network monitoring. For complete protection, UPS products should be used with data line surge protectors and UPS monitoring software.

4N-AEABF-AA	Prestige 1250EXT, 1250 VA/900W, 1 phase, 60 Hz, 120V 6-foot cord with 5-15P plug, (4) 5-15R receptacle, 9 minutes battery at full UPS load.
4N-AEABF-BF	Prestige 1250EXT, 1250 VA/900W, 1 phase, 50 Hz, 200-240V in/out selectable. Uses system power cord for detachable IEC320 input connection at UPS. Includes (3) IEC320 10A output receptacles, (2) output jumpers with IEC320 connectors to system.
4N-AEAE0-PA	Hot-swap Power-Pass Module for 60 Hz UPS with (7) 5-15R Surge Protected outlets.
4N-AEAE0-PB	Hot-swap Power-Pass Module for 50 Hz UPS with (6) IEC320, 10A surge protected outlets.
4N-AEWAR-G1	Prestige 5 year on-site exchange warranty upgrade (U.S. only).

Data Surge Protection

4N-GA249-AB*	Surge protector, modem connection, wall plug-in
4N-GA249-CA*	Surge protector, 10BaseT connection, wall plug-in
4N-GA510-BF	Surge Protector, ThinWire connection, device port
4N-GA245-xx	Surge Protector, multi-port connection, din rail/Rackmount

* Additional plug-in data modules (4N-GA240-xx) available.

Monitoring and Unattended Shutdown Software for above UPS systems only (Include cables, media and documentation)

4N-AEAES-AA	Single system shutdown for Windows NT
4N-AEAES-BA	NW management and multi system shutdown for Windows NT*
4N-AEAES-AK	Single system shutdown for DIGITAL UNIX
4N-AEAES-BK	NW management and multi system shutdown for DIGITAL UNIX*
4N-AEAES-EM	Single system shutdown for OpenVMS

* Require network adapters: 4N-AEAE0-DA/DC for 120V 60 Hz; or 4N-AEAE0-DB/DD for 220V 50 Hz
 -DA and -DB = Twisted Pair; -DC and -DD = Thin Wire