

NetApp F825 Enterprise Filer Specifications

Product Highlights

Operating System	Network Appliance™ Data ONTAP™ 6.5.1 software
Standard Software Features	Integrated automatic RAID manager, Snapshot™, Fast Boot, telnet, e-mail alerts, NIS, DNS, SNMP, FilerView®, NDMP
Network Protocol Support	NFS V2/V3/V4 over UDP or TCP, PCNFSD V1/V2 for (PC) NFS client authentication, Microsoft® CIFS, DAFS, VLD, HTTP 1.0, HTTP 1.1 virtual hosts
SAN Protocol Support	Fibre Channel Protocol (FCP) for SCSI; fabric-attached and direct-attached; iSCSI
Licensed Software Products	SnapManager® for Microsoft Exchange 5.5, SnapManager for Microsoft Exchange 2000, SnapManager for Lotus Domino, SnapManager for Microsoft SQL Server, SnapMirror®, SyncMirror™, SnapVault™, SnapRestore®, SnapDrive™, SnapLock™, Clustered Failover, MetroCluster, MultiStore™, DAFS Database Accelerator, DataFabric® Manager, Virtual File Manager™, SecureAdmin™, ApplianceWatch™ for HP Openview and Tivoli
Hardware Features	Full-duplex 10/100Base-T Ethernet onboard, diagnostic LED/LCD, 19" rack-mount enclosure, redundant hot-plug cooling fans, redundant hot-plug power supplies, floppy drive (F810/o), (CompactFlash on F825/c), optional 220V 42U 19" system cabinet
Default/Min./Max. RAID Group Sizes	Default: 7 data + 1 parity/Min.: 1 data + 1 parity/Max.: 13 data + 1 parity
Disk Shelves Supported (Fibre Channel)	FC7, FC8, FC9, DS14, DS14mk2 FC
Disk Drive Capacities Supported (FC)	9/18/36/72/144GB

Filer Specifications	NetApp F825c	NetApp F825
Max. Raw Capacity	6TB	3TB
Max. Number of Disk Drives	168	112
Max. Number of FC Loops	8	4
Max. Drives per FC Loop	56 or 84 ²	56 or 84 ²
Volumes and RAID Groups (min./max.)		
Min. of 1 RAID Group per Volume	2/84	1/56
Max. Volume Size	4TB	2TB
ECC Memory	2GB	1GB
Nonvolatile Memory	256MB	128MB
PCI Expansion Slots	12	7
Optional Network Connectivity (total):	6 max.	4 max.
Dual Gigabit Ethernet (Cu or optical)	6 max.	3 max.
Quad 10/100Base-T Ethernet	N/A	N/A
Gigabit Ethernet (Cu or optical)	6 max.	4 max.
DAFS—(GbE VI/IP)	3 max.	3 max.
Fibre Channel Target Mode HBA - SAN	4 max.	2 max. (single host attach)
Fibre Channel Disk HBA	8 max.	4 max.
Fibre Channel Disk Adapters	N/A	2 max.
Clustered Failover-Capable	N/A	Optional
Optional LVD, FWD SCSI, FC HBA for Backup	2 max.	1 max.

Filer Environmental Specifications	F825c	F825
AC Power/Max. Current	100 to 240VAC, 10A @ 100VAC	100 to 240VAC, 5A @ 100VAC
Thermal Rating	1,200 Btu/hr; 1,160 Btu/hr	600 Btu/hr; 580 Btu/hr
Height/Weight	10.2 EIA U (17.5", 44.5 cm)/132 lb (60 kg)	5.1 EIA U (8.75", 22.2 cm)/66 lb (30 kg)
Width/Depth	19" IEC rack-compliant (17", 43.2 cm)/24" (61 cm) chassis alone,+ 1.5" (3.8 cm) bezel	
Operating Temperature & Relative Humidity	10° C to 40° C (50° F to 104° F); 20% to 80% RH, noncondensing	
Nonoperating Temperature & Relative Humidity	-20° C to 65° C (-4° F to 149° F); 8% to 95% RH, noncondensing, in original container	
Operating Acoustic Noise	<52 dBA at 1 m	
Min. Service Clearances	9" (23 cm) front; 30" (76 cm) rear; 3" (7.6 cm) rear for cable radius	

HARDWARE

Network Appliance hardware gives you the industry's most flexible, reliable, and scalable storage solutions, with easy administration and built-in redundancy for maximum data availability and protection.

Storage Subsystem Specifications

Disk Drive Storage Shelf	DiskShelf14 family– DS14 and DS14mk2 FV; each w/ 14 low-profile slots for FC disk drives
Disk Drive Storage Shelf Interface	PCI-based Fibre Channel-Arbitrated Loop (FC-AL)
DiskShelf14 Interface	Dual, redundant loop resiliency circuit (LRC) modules or dual, redundant electronically switched hub (ESH) modules
Power Supply/Cooling Fans	Dual, redundant, hot-pluggable, integrated power supply/fan assemblies (220V/110V)
AC Power/Max. Current	100 to 120 VAC/4 A; 200 to 240 VAC/2 A
Operating Temperature & Relative Humidity	10° C to 40° C (50° F to 104° F); 5% to 95% relative humidity, noncondensing
Nonoperating Temperature & Relative Humidity	-40° C to 65° C (-40° F to 149° F); 5% to 95% relative humidity, noncondensing
Thermal Rating	1,195 Btu/hr (fully loaded shelf), 1,191 Btu/hr (LRC)
Operating Acoustic Noise	<60 dBa @ 1 m at 20° C
Height/Weight	3 EIA U (5.25", 13.3 cm)/77 lb (35 kg) fully loaded
Width/Depth	19" IEC rack-compliant (17.6", 44.7 cm)/20" (50.85 cm)

NetApp Systems Cabinet

Includes 2 Sets of Dual 16A, Zero U Power Distribution Units (PDU)	Accommodates 1 filer head and 12 disk shelves, or 2 filer heads and 10 disk shelves, or 14 shelves
AC Power	200 to 240 VAC
Current	32A total—2 redundant sets of dual 16A cables with NEMA L6-20 or IEC 309 connectors
Dimensions (height/width/depth)	200 cm (78.75")/60 cm (23.6")/90 cm (35.4")
Min. Clearances	48" (122 cm) front and rear
Weight (empty)	125 kg (275 lb)

Regulations

NetApp F800 Series Filer Appliance, DiskShelf14

Filer Safety	EN 60950:1992, CE, UL1950, CSA 950-95, TUV 950, CB IEC 60950 2 nd Ed. (all national deviations), EN60825-1
Disk Shelf Safety	UL/C-UL; CE
Emissions	FCC Class A, EN 55022:1998, EN 61000-3-2, EN 61000-3-3, CE, BSMI, AS/NZ 3548, VCCI
Immunity	EN 55024: 1998

F800 Series FC Switch Support—Tape/SAN

Vendor	Model	Support	Minimum Firmware Level SAN	Minimum Firmware Level TapeSAN
Brocade	Silkworm 2400/2800	TapeSAN	N/A	2.2.2a
Brocade	Silkworm 3200/3800	Host connection for SAN/TapeSAN	3.1.1b	3.0.2c
Brocade	Silkworm 3900/12000	Host connection for SAN/TapeSAN	4.1.1	4.0.0c
McData	ES-3016/ES-3032	Host connection for SAN/TapeSAN	N/A	2.00.00.03
McData	Intrepid 6064/Intrepid 6140/ED-5000	Host connection for SAN	4.01.01	4.01.01
McData	Sphereon 3216/Sphereon 3232	Host connection for SAN	4.01.01	2.00
McData	Sphereon 4500	Host connection for SAN	4.01.01	4.01.01
Cisco	MDS-9120, -9140	Host connection for SAN	1.2	N/A
Cisco	MDS-9216, -9506, -9509	Host connection for SAN	1.1	N/A

F800 Series Enterprise Filer Tape Drive Support

Tape Drives	Interface	Tape Drives	Interface
Exabyte 8900 (Mammoth – 1)	HVD/LVD SCSI	Quantum DLT-1	LVD SCSI
Exabyte Mammoth – 2	HVD/LVD SCSI or FC	Quantum SDLT 320/SDLT220	HVD/LVD SCSI
HP Ultrium (LTO)	LVD SCSI	Seagate Ultrium (LTO)	LVD SCSI
IBM 3590B & 3590E	HVD SCSI or FC	Sony AIT-1, Sony AIT-2	HVD/LVD SCSI
IBM ULT3580-TDI (LTO)	LVD or FC	Sony AIT-3	LVD SCSI
IBM Ultrium-TDI (LTO)	LVD or FC	Sony GY 2120 (DTF)	HVD SCSI
Quantum DLT 7000	HVD/SE SCSI	Sony GY 8240 (DTF2)	HVD SCSI or FC
Quantum DLT 8000	HVD/LVD SCSI	STK 9840, 9840B & 9940	HVD SCSI or FC

Visit www.netapp.com/solutions/data_protection_devices.html for current supported drives.

FC = Fibre Channel; HVD = High Voltage Differential; LVD = Low Voltage Differential; SE = Single-Ended; SE and LVD cannot be mixed on an adapter.

¹ 9/18GB drives are legacy support and not currently shipping.

² Configurations with 84 drives per loop are limited. Contact a Network Appliance representative for more information.



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Specifications are subject to change without notice. Contact Network Appliance for current PCI adapter and disk drive support maximums.

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