

EMC Celerra NX4 Unified Storage



EMC Celerra NX4 systems can be integral elements of a comprehensive information infrastructure strategy—a strategy that helps your enterprise attain the maximum value from its information, at the lowest TCO, at every point in the information lifecycle. Information lifecycle management maps the right service level to the right application at the right cost—at the right time.

Specifications

Architecture

The EMC® Celerra® NX4 Unified Storage system supports both single and dual X-Blade 4 configurations. Dual X-Blade 4 configurations can be deployed in primary/primary mode for the highest performance or primary/standby for additional hardware availability protection (i.e., X-Blade failover).

Each X-Blade 4 consists of the following:

- Dual 2.8 GHz Pentium IV CPUs
- 4 GB Double Data Rate RAM (266 MHz)
- 2 Fibre Channel ports for backend connectivity
- 1 Fibre Channel port for tape connectivity
- 4 10/100/1000 BaseT ports
- 1 10/100/1000 management port
- Instance of DART File Server software

Single X-Blade 4 configurations can be upgraded non-disruptively to dual X-Blade 4 configurations.

Platform managed by a Control Station:

- Connection to each X-Blade via 10/100 interface
- Manages X-Blade failover
- Manages all file systems via GUI
- SNMP MIB II manageability
- Telnet access option
- HTTP server management interface
- Dual USB, 40 GB ATA, CD, floppy

NX4 comes with integrated CLARiiON® AX4 storage featuring:

- Four to 60 SAS or SATA disks in up to four expansion enclosures with the ability to mix both disk types in the same enclosure
- Four optional Fibre Channel ports for host connectivity

DART File Server Facilities

Protocols Supported

- NFSv2, v3, and v4, CIFS, FTP, iSCSI, Fibre Channel
- Network Lock Manager (NLM) v1, v3, v4
- Routing Information Protocol (RIP) v1-v2
- Simple Network Mgmt Protocol (SNMP)
- Network Data Mgmt Protocol (NDMP) v1-v4
- Address Resolution Protocol (ARP)
- Internet Control Message Protocol (ICMP)
- Network Time Protocol (NTP) client
- Simple Network Time Protocol (SNTP)
- Kerberos Authentication
- Lightweight Directory Access Prot (LDAP)

Client Connectivity

- Files can be accessed by FTP, NFS, and CIFS
- Block access by iSCSI and Fibre Channel
- Virtual Data Movers for Windows clients
- Ethernet Trunking
- Link Aggregation (IEEE 802.3ad)
- Virtual LAN (IEEE 802.1q)
- UNIX archive utilities (tar/cpio)
- Network Status Monitor (NSM) v1
- Portmapper v2
- Network Information Service (NIS) Client
- Supports Microsoft DFS as Leaf node or Root Server
- NT LAN Manager (NTLM)
- LDAP signing for Windows
- Microsoft Windows Server 2003 Access-based Enumeration (ABE)



Optional DART Software

- Celerra Anti-virus
- Celerra Replicator
- Celerra Manager Advanced Edition
- Celerra File-Level Retention

Note: SnapSure™ and Celerra Manager-Basic are bundled.

Optional CLARiiON Software

- Navisphere®
- SnapView™
- MirrorView™
- SAN Copy™

Note: PowerPath® is bundled

High Availability Features

NX4-Blade Enclosure

- Redundant power supplies for X-Blades
- Hot-swappable power and cooling
- Internal environmental status monitoring

DART Software Capabilities

- Ethernet Trunking
- Link Aggregation
- Failsafe Networking
- Network interface port failover
- X-Blade failover

Control Station

- Auto Dial-out event alerting
- Dial-in remote maintenance

CLARiiON Storage

- Disk scrubbing
- Mirrored write cache with de-stage AC power loss
- Redundant hot-swap power, bus structures, and I/O subsystems
- Online global hot-spare disks
- PowerPath failover for Windows and UNIX hosts

Dimensions (approximate)

Measurement Item	NX4 with 12 disks	Expansion Disk Tray (can add 4)
Height	8.71 in. (22.15 cm), 5 NEMA units (U), including mounting rails	3.5 in. (8.98 cm) 2 NEMA units (U)
Width	18.92 in. (48.06 cm); mounting bars fit standard 19-inch NEMA cabinets	17.5 in. (44.45 cm)
Depth	Chassis to rear: 31.58 in.(80.21 cm)	20.00 in. (50.8 cm)
Weight	182.91 lbs (83.13 kg)	54 lbs (24.5 kg)

AC Power and Dissipation

Measurement Item	NX4 with 12 disks	Expansion Disk Tray (can add 4)
Frequency	47-63 Hz	47-63 Hz
AC Voltage	100 - 240 Vrms, single phase	100 - 240 Vrms, single phase
Current	9.7 – 4.4A	3.6-1.5A
Power Factor	0.98 minimum	0.98 minimum
Power consumption	1,010vA (960W) max.	390VA (360W) max.
Heat dissipation	3,275 BTU/hr max.	1,228 BTU/hr max.
Protection	Rack mount; 12 amps, fused	Rack mount; 12 amps, fused
Inlet Type	IEC320-C14 appliance coupler	IEC320-C14 appliance coupler

Operating Environment

(See CLARiiON Environmental and Regulatory Specification)

Temperature:	50–104 degrees F (10–40 degrees C)
Temperature Gradient:	18 degrees F/hr (10 degrees C/hr)
Relative Humidity:	20% to 80% (non-condensing)
Altitude:	8,000 ft. (2438.4 m) @ 104 degrees F (40 degrees C) max. 10,000 ft (3048 m) @ 98.6 degrees F (37 degrees C) max.



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