

EMC DATA DOMAIN EXPANSION SHELVES

Extended data retention for Data Domain deduplication storage systems



ES30 Expansion Shelf



ES20 Expansion Shelf

EMC® Data Domain® ES30 and ES20 expansion shelves expand the usable storage for the EMC Data Domain Appliance Series, EMC Data Domain Archiver and EMC Data Domain Global Deduplication Array, enabling months of backup and archive data retention. EMC Data Domain high-speed, inline deduplication storage systems support capacities up to 28.5 PB of logical storage per system, for a typical enterprise dataset and backup policy. The extended disk-based retention enables more cost-efficient, high-speed backups, more reliable recoveries and longer-term data retention.

SPECIFICATIONS

EXTERNAL INTERFACE (HOST/EXPANSION)

ES30

- Dual 4 lane 6 Gb/s serial attached SCSI II (SAS) ports per Link Control Card (LCC)—one for host and one for expansion
- SFF-8088 connectors (mini-SAS)
- Up to 5 meter cable length

ES20

- Dual 4 lane 3 Gb/s serial attached SCSI I (SAS) ports per controller—one for host and one for expansion
- SFF-8470 connectors (Infiniband style)
- Up to 5 meter cable length

MAXIMUM SYSTEM CONFIGURATION

GDA

- Up to 24 expansion shelves using either 2 TB drives or 1 TB drives
- Support for a mix of expansion shelves using 2 TB or 1 TB drives, up to maximum external storage capacity

DD890

- Up to 12 expansion shelves using 2 TB drives
- Up to 16 expansion shelves using 1 TB drives
- Support for a mix of expansion shelves using 2 TB or 1 TB drives, up to maximum external storage capacity

DD880

- Up to six expansion shelves using 2 TB drives
- Up to 12 expansion shelves using 1 TB drives
- Up to 12 ES20 expansion shelves using 500 GB drives
- Support for a mix of expansion shelves using 2 TB, 1 TB, or (ES20 only) 500 GB drives up to maximum external storage capacity

DD Archiver

- Up to 24 expansion shelves using either 2 TB or 1 TB drives
- Support for a mix of expansion shelves using 2 TB or 1 TB drives, up to maximum external storage capacity

DD860

- Up to six expansion shelves using 2 TB drives
- Up to 12 expansion shelves using 1 TB drives
- Support for a mix of expansion shelves using 2 TB or 1 TB drives, up to maximum external storage capacity

DD670

- Up to two expansion shelves with 2 TB drives
- Up to four expansion shelves with 1 TB drives
- Support for a mix of expansion shelves up to maximum external storage capacity

DD640

- Up to one expansion shelf using 2 TB drives
- Up to two expansion shelves with 1 TB drives
- No support for ES20

ES30 DISK DRIVES

- 15-drive bays per ES30 expansion shelf, supporting low profile, one inch high, 3.5-inch form factor drives
- Drive choices
 - SATA I (3 Gb/s) 2 TB, 7200 RPM
 - SATA I (3 Gb/s) 1 TB, 7200 RPM
 - Integrated SAS expander module
 - Point-to-point disk connectivity

ES20 DISK DRIVES

- 16-drive bays per ES20 expansion shelf, supporting low profile, one inch high, 3.5-inch form factor drives
- Drive choices
 - SATA I (3 Gb/s) 2 TB, 7200 RPM
 - SATA I (3 Gb/s) 1 TB, 7200 RPM
 - SATA I (3 Gb/s) 500 GB, 7200 RPM
 - Integrated SAS expander module
 - Point-to-point disk connectivity

SYSTEM AVAILABILITY

Hot Swappable Components PSU/cooling modules, disk drives, and disk controllers/LCCs

DIMENSIONS

System Dimensions

ES30: (WxDxH) 19" x 14" x 5.25" (48.3 cm x 35.56 cm x 13.34 cm) 3 EIA units

ES20: (WxDxH) 19" x 23.25" x 5.16" (48.3 cm x 59 cm x 13.1 cm) 3 EIA units

Weight

ES30: 68 lbs (30.8 kg)

ES20: 78 lbs (35.5 kg)

OPERATIONAL

Power (VA)

ES30: (VA) 100-120/200-240 V~, 50/60 HZ 280 VA

ES20: (VA) 100-120/200-240 V~, 50/60 HZ 438 VA

Power Consumption

ES30: 235 W

ES20: 420 W

Power Cords: Dual IEC detachable power cords

Thermal Rating

ES30: 800 BTU/hr

ES20: 1,433 BTU/hr

Operating Temperature: 10°C to 35°C (50°F to 95°F)

Operating Humidity: 20% to 80%, non-condensing

Non-Operating (Transportation) Temperature: -40°C to +65°C (-40°F to +149°F)

Operating Acoustic Noise

ES30: Operating Acoustic Noise Declared noise emission values per ISO 9296:

Sound Power, LWAd: 6.5 bels

Sound Pressure, LpAm: 48.5 dB

ES20: Max 58 dB LpA average measured at the bystander positions

REGULATORY APPROVALS

Safety: CE to IEC 950/EN 60950-1 (Europe/ Worldwide); UL and cUL to UL 60950-1 (USA and Canada)

Emissions: FCC Class A, EN55022 Class A, CISPR22, VCCI, BSMI, GOST, IRAM, MIC, ICES-003

Immunity: EN 55024, CISPR 24

Power Line Harmonics: EN 61000-3-2

CONTACT US

To learn more about how EMC products, services, and solutions can help solve your business and IT challenges, contact your local representative or authorized reseller—or visit us at www.EMC.com.

EMC², EMC, Data Domain, Global Compression, SISL, and the EMC logo are registered trademarks or trademarks of EMC Corporation in the United States and other countries. All other trademarks used herein are the property of their respective owners.
© Copyright 2011 EMC Corporation. All rights reserved. Published in the USA. Specification Sheet 09/11 H6802.5

EMC Corporation
Hopkinton, Massachusetts 01748-9103
1-508-435-1000
In North America 1-866-464-7381
www.EMC.com

EMC Backup Recovery Systems
Santa Clara, California 95054
1-408-980-4800
In North America 1-866-933-3873

EMC²