



EMC Data Domain DD880

Deduplication storage for enterprise data centers

Next-generation data protection

EMC® Data Domain® deduplication storage systems have revolutionized disk backup, disaster recovery, and remote office data protection with high-speed, inline deduplication. Backup data can be reduced in size by an average of 10-30x, so disk backup storage is now cost-effective for long-term onsite retention and highly efficient for network-based replication to disaster recovery sites.

Scalable deduplication storage

A single EMC Data Domain DD880 system achieves single-stream throughput of up to 1.28 TB/hour—performance that is imperative for protecting large, business critical databases in the data center. The DD880 provides aggregate throughput of up to 8.8 TB/hour using multiple backup policies. Data protection and archive capacities are supported up to 7.1 PB of logical storage per system, enough to satisfy most enterprise datasets and backup policies.

Data Domain systems store each unique data sequence only once and save significant physical storage capacity by substituting small references for each identical redundant sequence. The DD880 offers an average of 10-30x data reduction for enterprise recovery images, enabling cost-efficient retention on disk for high-speed recoveries. Snapshot technology further enables extended local and offsite retention on disk.

Easy integration

The Data Domain DD880 is qualified with all leading enterprise backup software and archiving applications and easily integrates into your existing storage infrastructure without change for either data center or distributed office data protection.

Multi-site disaster recovery

EMC Data Domain Replicator software enables network-efficient replication to a remote site for disaster recovery, remote office data protection, or multi-site tape consolidation. The DD880 supports replication fan-in from Data Domain systems installed at up to 180 remote offices. Cross-site deduplication minimizes the required bandwidth between all sites, since only the first instance of data is transferred across any of the WAN segments. Datasets are effectively shrunk by 99 percent, to a size where network-efficient replication is fast and reliable.

Ultra-safe storage for reliable recovery

The EMC Data Domain Data Invulnerability Architecture provides the ultimate defense against data integrity issues. Continuous recovery verification along with extra levels of data protection continuously detect and protect against data integrity issues during the initial backup and throughout the data lifecycle. Unlike any other enterprise array or filesystem, each system ensures recoverability is verified and then continuously re-verified.

Operational simplicity

EMC Data Domain systems are simple to install and manage. Connect an appliance to your backup server as either a file server via Ethernet or as a virtual tape library (VTL) via Fibre Channel. EMC Data Domain Boost (for use with Symantec OpenStorage) is also supported; all three interfaces can be used simultaneously.

The Big Picture

Scalable Deduplication Storage

- Fast, inline deduplication with up to 8.8 TB/hour of throughput
- Extended retention providing up to 7.1 PB of logical storage
- 10-30x average data reduction

Easy Integration

- Supports leading backup and archive applications
- Supports leading enterprise applications for database, e-mail, content management, and virtual environments
- Simultaneous use of VTL, NAS, and EMC Data Domain Boost

Multi-Site Disaster Recovery

- 99 percent bandwidth efficiency for network-based replication
- Flexible replication topologies for tape-free DR or tape consolidation
- Replication from up to 180 remote sites

Ultra-Safe Storage for Reliable Recovery

- Continuous recovery verification, fault detection, and healing
- Dual disk parity RAID 6

Operational Simplicity

- Power, cooling, and space efficiencies for green operation
- Supports any combination of backup and archive applications in a single system

DD880 Specifications	
Capacity, Raw ³	Up to 192 TB
Logical Capacity, Standard ^{1,3,4}	2.8 PB
Logical Capacity, Redundant ^{2,3,4}	7.1 PB
Maximum Throughput (Other) ⁵	5.4 TB/hr
Maximum Throughput (DD Boost) ⁶	8.8 TB/hr
Power Dissipation ⁷	937 W
Cooling Requirement ⁷	3208 BTU/hr

1. Mix of typical enterprise backup data (filesystems, databases, e-mail, developer files), full backup weekly, incremental backup daily, to system capacity.
2. Mix of typical enterprise data (filesystems, databases, e-mail, developer files), full backup daily, to system capacity.
3. All capacity values are calculated using Base 10 (i.e., 1 TB = 1,000,000,000,000 bytes) and the maximum raw capacity configuration.
4. Includes support for add-on shelves.
5. Maximum throughput achieved using Symantec OpenStorage and 10 Gb Ethernet.
6. Maximum throughput achieved using DD Boost and 10 Gb Ethernet.
7. Controller only.

Software

EMC Data Domain Operating System (DD OS) 4.9 or later

Software Features

Global Compression™, Data Invulnerability Architecture including end-to-end verification (ongoing) and integrated dual disk parity RAID 6, snapshots, telnet, FTP, SSH, e-mail alerts, scheduled capacity reclamation, Ethernet failover and aggregation; EMC Data Domain Boost, EMC Data Domain Replicator, EMC Data Domain Encryption, EMC Data Domain Virtual Tape Library and EMC Data Domain Retention Lock optional software

Management

EMC Data Domain Enterprise Manager, SNMP, and command line interface

Data Access

NFS v3 over TCP, CIFS, DD Boost (for use with Symantec OpenStorage), tape library emulation (VTL) over Fibre Channel

System Expansion

Up to 192 TB raw capacity

- Up to six 32 TB expansion shelves
- Up to twelve 16 TB expansion shelves
- Up to twelve 8 TB expansion shelves
- Support for a mix of 32 TB, 16 TB, and 8 TB expansion shelves up to raw capacity of 192 TB

Regulatory Approvals

Safety: UL 60950-1, CSA 60950-1, EN 60950-1, IEC 60950-1, GS, SABS, GOST, IRAM
Emissions: FCC Class A, EN 55022, CISPR 22, VCCI, BSMI, MIC, ICES-003
Immunity: EN 55024, CISPR 24
Power Line Harmonics: EN 61000-3-2

Hardware Platform

4U 19-inch, rack mountable, use in 4-post rack, hotplug disks, redundant fans, redundant power supplies, serial port, 2 copper 10/100/1000 Ethernet ports and optional dual-port copper or optical 1 Gb Ethernet and dual-port copper or optical 10 Gb Ethernet

System Weight

90 lbs (40.8 kg)

System Dimensions (WxDxH)

19" x 27.8" x 7" (48.3 cm x 70.6 cm x 17.8 cm)
4 EIA units

Minimum Clearance

Front, with bezel closed: 1.56" (4.0 cm)
Rear: 5" (12.7 cm)

Power (VA)

200-240 V~, 50/60 Hz; 1033 VA

System Thermal Rating

3208 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

Max 7.0 BA, sound power at rear of unit when all drives seek simultaneously



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Take the next step

To learn more about EMC Data Domain deduplication storage, contact your local EMC sales representative or authorized value added reseller, call us at 1-866-WE-DDUPE or visit www.EMC.com.