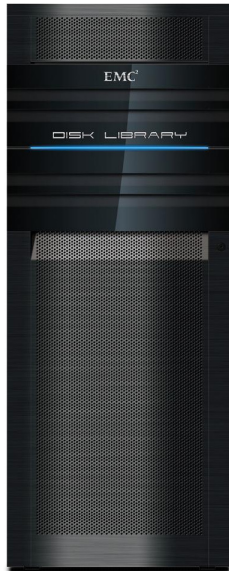


# EMC Disk Library for Mainframe



The EMC<sup>®</sup> Disk Library for mainframe (DLm) family addresses the challenges of the mainframe data center and delivers industry-leading scalability, performance, and availability to tape operations, while working seamlessly with the current host and applications. DLm combines low-cost SATA drives, RAID 6 protection, hot-standby disks, tape emulation and hardware compression, and the functionality necessary to provide enterprises with a high-capacity mainframe tape replacement solution that delivers increased application availability.

DLm connects directly to the IBM systems using FICON or ESCON channels and it appears to the mainframe operating system as 3480/3490/3590 tape drives. All tape commands are supported by the DLm and respond as real tape drives so existing work processes and applications can run without any modifications. With DLm, the retrieval time of information is reduced from minutes via tape to just seconds via disk.

## Specifications

### Disk Library Connectivity

VTE connection types are ESCON and FICON

Each VTE has either two FICON channels or three ESCON channels to connect to the mainframe host

Number of VTEs	1 VTE	2 VTEs	3 VTEs	4 VTEs	5 VTEs	6 VTEs
FICON Ports	2	4	6	8	10	12
ESCON Ports	3	6	9	12	15	18

DLm120 can have 1 or 2 VTEs

DLm960 can have from 1 to 6 VTEs

### Transfer Rates

1 VTE	200 MB/s
2 VTEs	400 MB/s
3 VTEs	600 MB/s
4 VTEs	800 MB/s
5 VTEs	1 GB/s
6 VTEs	1.2 GB/s

### Drive Interface

Disk Drives	1 TB (7,200)
Form Factor	3.5"
Height	1.0"
Rotational Speed	7,200 rpm
Interface	SATA
Data Buffer	32 MB
Power Watts (maximum)	12.15

### Dimensions (approximate)\*

Model	EIA Units	Height (in/cm)	Width (in/cm)	Depth (in/cm)	Max. Weight (lbs/kgs)
<b>DLm960</b>					
VTEC Bay	19"x40U	76.66'/194.7	24.02/61	41.88/106.4	874/627.3
NAS Bay	19"x40U	76.66'/194.7	24.02/61	41.88/106.4	1,330/603.3
Expansion Bay	19"x40U	76.66'/194.7	24.02/61	41.88/106.4	1,330/603.3
Storage Bay	19"x40U	76.66'/194.7	24.02/61	41.88/106.4	1,400/625
<b>DLm120</b>					
	19"x40U	76.66'/194.7	24.02/61	41.88/106.4	1,248/575.6

\*When trim kit is unattached, system bay height is 74.90 inches (190.25 cm).

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## Power

	DLM960 VTEC Cab	DLM960 NAS Cab	DLM960 Exp. Cab	DLM960 Storage Cab	DLM120
Frequency	50–60 Hz	50–60 Hz	50–60 Hz	50–60 Hz	50–60 Hz
AC Voltage	200–240 VAC +/- 10% Single-phase				
Power Consumption Watts (maximum)	3,200	5,720	5,720	4,040	3,600
Heat Dissipation BTU/hr (maximum)	11,000	17,200	17,200	13,200	11,500

The data about weight and power is based on fully configured systems and includes VTEs, disk drives, switches, and all other storage array components. The exact power and weight requirement is based on the actual DLM configuration based on the number of VTEs and capacity.

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## AC Power Capability

### 40U Cabinet

AC Voltage	200–240 VAC +/- 10%
Frequency	50–63 Hz
Power Configuration	Two power domains (VTEC, NAS, storage and expansion), each redundant
Power Inlet Count	DLM960 VTEC, DLM960 storage and DLM120 bays all require two; DLM960 NAS bay and DLM960 expansion bay require four
Plug Type	NEMA L6-30P or IEC309-332 P6 or IP57 (Australia)
Input Power Capacity	4,800 VA @200 VAC, 5,760 VA @240 VAC (w/two plugs) 9,600 VA @200 VAC, 11,520 VA @240 VAC (w/four plugs)
AC Protections	30 A circuit breakers internally on each power branch

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## Operating Environment

Temperature	50–90 degrees F (10–32 degree C)
Temperature Gradient	10 degrees C/hr
Relative Humidity	20% to 80% (non-condensing)
Operating Altitude (32 degrees C)	7,500 ft. (2,286 m) @ 90 degrees F (32 degrees C) max.
Operating Altitude (maximum)	10,000 ft. (3,048 m) 1.1 degrees F (0.611 degrees C) derating per 1,000 ft. (304.8 m)

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## Electromagnetic Emissions and Immunity

FCC Class A  
EN55022 Class A  
CE Mark  
VCCI Class AA (for Japan)  
ICES-003 Class A (for Canada)  
AZ/NZS, CISPR22, Class A (for Australia/New Zealand) EN55024 Immunity, ITE

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## Safety

UL 60950; CSA C22.2-60950; IEC 60950, TUV, GOST, IRAM

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## Quality Standard

Manufactured under an ISO 9000-registered quality system.



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