

EMC Symmetrix DMX3000

Open Systems and Mainframe Specifications

Sample Configuration Data

73GB Drives			73GB Drives			Maximum Global Memory (GB)**
Addressable Drives	SRDF Usable Capacity (GB)*		Addressable Drives	Mirrored Usable Capacity (GB)*		
	Open	Mainframe		Open	Mainframe	
192	14,035	13,856	96	7,017	6,928	128
288	21,052	20,784	144	10,526	10,392	128
384	28,070	27,713	192	14,035	13,856	128
480	35,088	34,641	240	17,544	17,320	128
576	42,105	41,569	288	21,052	20,784	128

73GB Drives			73GB Drives			Maximum Global Memory (GB)**
Addressable Drives	Parity RAID (3+1) Usable Capacity (GB)*		Addressable Drives	Parity RAID (7+1) Usable Capacity (GB)*		
	Open	Mainframe		Open	Mainframe	
144	10,526	10,392	168	12,280	12,124	128
216	15,789	15,588	252	18,421	18,186	128
288	21,052	20,784	336	24,561	24,249	128
360	26,316	25,981	420	30,702	30,311	128
432	31,579	31,177	504	36,842	36,373	128

146GB Drives			146GB Drives			Maximum Global Memory (GB)**
Addressable Drives	SRDF Usable Capacity (GB)*		Addressable Drives	Mirrored Usable Capacity (GB)*		
	Open	Mainframe		Open	Mainframe	
192	28,032	27,763	96	14,016	13,881	128
288	42,048	41,644	144	21,024	20,822	128
384	56,064	55,526	192	28,032	27,763	128
480	70,080	69,408	240	35,040	34,704	128
576	84,096	83,289	288	42,048	41,644	128

146GB Drives			146GB Drives			Maximum Global Memory (GB)**
Addressable Drives	Parity RAID (3+1) Usable Capacity (GB)*		Addressable Drives	Parity RAID (7+1) Usable Capacity (GB)*		
	Open	Mainframe		Open	Mainframe	
144	21,024	20,822	168	24,528	24,292	128
216	31,536	31,233	252	36,792	36,439	128
288	42,048	41,644	336	49,056	48,585	128
360	52,560	52,056	420	61,320	60,732	128
432	63,072	62,467	504	73,584	72,878	128

Configurations of mixed 73GB and 146GB disks are allowed.
 Parity RAID 3+1 or 7+1 and RAID 1 (Mirroring) can coexist in the same system.
 Parity RAID 3+1 and Parity 7+1 cannot coexist in the same system.
 12GB of the total raw capacity will be reserved for internal Symmetrix File System use.
 *All capacities are based on 1GB=1,000,000,000 bytes.
 **Individual system global memory sizes are based upon specific configurations and customer requirements.

Disk Drive Connectivity

Disk Directors	8
Total number of 2Gb Fibre Channel ports	64
Number of redundant 2Gb Fibre Channel loops	32
Disk Drives per redundant Fibre Channel loop	up to 18

Host Connectivity

DMX3000	Open Systems		Mainframe	
	Min	Max	Min	Max
Fibre Channel Ports	16	64	-	-
Gigabit Ethernet Ports	4	32	-	-
iSCSI Ports	4	32	-	-
ESCON Ports	-	-	16	64
FICON Ports	-	-	8	32

Note: Mixed combinations of the above port types are supported.
 ESP software is required to run mainframe with open systems interfaces.

Disk Emulation

DMX3000	Open Systems	3380K	3390-1	3390-2	3390-3	3390-9
MB/Volume	30,720	1,891	946	1,892	2,838	8,514
Bytes/Track	32,768	47,476	56,66 4	56,66 4	56,66 4	56,66 4
Bytes/Cylinder	491,520	712,140	849,960	849,960	849,960	849,960
Cylinders/Volume	65,536	2,655	1,113	2,226	3,339	10,017



Hyper-Volume Extension (HVE)

	Open Systems			Mainframe					
	2GB*	4GB*	9GB*	3380K*	3390-1	3390-2*	3390-3*	3390-9*	3390-27*
Emulation Mode*									
73GB Drives									
Maximum Complete Logical Volumes	36	18	8	36	75	37	25	8	2
146GB Drives									
Maximum Complete Logical Volumes	73	36	16	73	128	75	50	16	5

Hyper-Volume Extension provides the ability to configure a single physical disk device as multiple logical volumes in logical-to-physical relationships ranging from 1:1 to 128:1.

* A single physical disk device can support multiple model types within a single data format emulation mode.

Available Software*

Platform Software	Double Checksum InfoMover SRDF/Data Mobility TimeFinder	SRDF/A EMC Snap ECRC	Enterprise Storage Platform (ESP) Symmetrix Remote Data Facility (SRDF) Symmetrix Data Migration Services (SDMS)
Intelligent Supervision	ControlCenter Automated Resource Manager ControlCenter StorageScope ControlCenter Symmetrix Manager ControlCenter Symmetrix Optimizer ControlCenter SAN Manager	ControlCenter SAN Architect ControlCenter AutoAdvice ControlCenter Common Array Manager ControlCenter Workload Analyzer ControlCenter Database Tuner	
Information Safety	EMC Data Manager (EDM) ControlCenter Symmetrix Data Mobility Manager CopyCross	EMC Replication Manager ControlCenter SRDF/TimeFinder Manager	
Infrastructure Services	GeoSpan Family ResourcePak for Windows	COMPAV/MA PowerPath	ResourcePak Base for OS/390 and z/OS ResourcePak Extended for OS/390 and z/OS

* Contact your EMC sales representative for software license model numbers, prerequisites, and additional information.

Interoperability Support

Symmetrix systems support all popular hardware and operating system platforms, storage area networks (SANs), and high-availability cluster environments. Refer to the EMC Support Matrix on EMC.com or contact your local EMC sales representative for specific configuration support.

Physical Specifications*

Height** (in/cm)	Width (in/cm)	Depth (in/cm)	Front Service Area (in/cm)	Rear Service Area (in/cm)
75.43/191.59	70.25/178.4	37.37/94.86	36.0/91.44	36.0/91.44

*Values represent maximum figures for each configuration.

**An additional 18 inches (45.7cm) is required for ceiling/top clearance.

Weight*

Physical Drives	192	288	384	480	576
Weight (lb/kg)	3,646/1,657	3,886/1,766	4,126/1,875	4,366/1,985	4,606/2,094

*Values represent maximum figures for each configuration.

Power and Cooling Data*

Physical Drives	192	288	384	480	576
Power Consumption (kVA)	6.3	11.4	13.3	15.2	17.0
Heat Dissipation (Btu/hr)	23,075	38,872	45,505	52,294	58,217

*Values represent maximum figures for each configuration.

Power Specifications

	North America and International 3-phase (Delta - 4 Wire)	International* 3-phase (Wye - 5 Wire)
Input Voltage (VAC)	200-240	200-240
Frequency (Hz)	47-63	47-63
Circuit Breaker (Amps), recommended	50	32
Power Drops	4	4
Power Connector	(4) 9P54U2T	Country Specific
User Connector	(4) 9C54U2T	Country Specific
Auto-Call Modem Requirements	North American installations require connection to a 110VAC power source at 60Hz through a NEMA 5-15R receptacle. International installations are country specific. * For higher voltage installations (380-415 VAC line to line) a 32 amp rated breaker is recommended.	

Environmental Specifications (operating)

Temperature (°F/°C)	50-90°F/10-32°C
Altitude (ft/m), max.	8,000/2,500
Humidity (%), non-condensing	20-80
Raised Floor	Required



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Specification Sheet

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