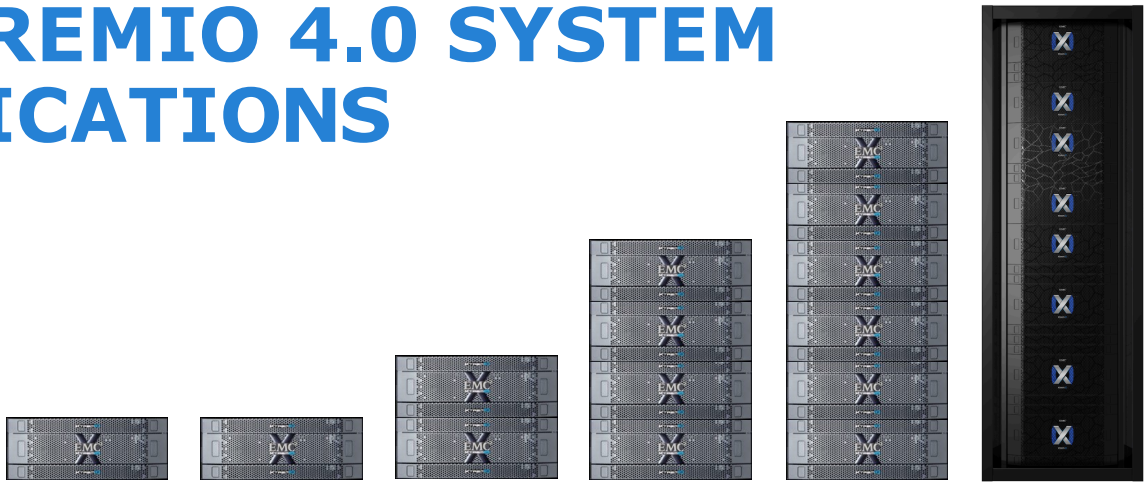
EMC XTREMIO 4.0 SYSTEM SPECIFICATIONS



System Specifications	Starter X-Brick	1 X-Brick	2 X-Brick Cluster	4 X-Brick Cluster	6 X-Brick Cluster	8 X-Brick Cluster
Active-Active Controllers	2	2	4	8	12	16
SSD enclosures (25 SSDs each)	1	1	2	4	6	8
Number of SSDs	13 (expandable to 25)	25	50	100	150	200
Battery Backup Units	2	2	2	4	6	8
Infiniband Switches	0	0	2	2	2	2
Power Socket Number/Type (internal to rack)	4 x IEC C14 (220V)	4 x IEC C14 (220V)	14 x IEC C14 (220V)	24 x IEC C14 (220V)	34 x IEC C14 (220V)	44 x IEC C14 (220V)
Power Consumption (typical)	750W	816W	1,749W	3,367W	4,985W	6,603W
Rack Space	6U	6U	13U	23U	33U	43U
Weight (including rack) (kg/lbs.)	252 / 557	255 / 563	349 / 769	502 / 1,106	654 / 1,443	817 / 1,798
Weight (excluding rack) (kg/lbs.)	94 / 208	99 / 213	190 / 419	344 / 756	497 / 1,093	650 / 1,430
Cooling Requirements (BTU/hr)	2,576	2,576	5,500	10,612	15,724	20,836
Performance (*100% random IOs, no caching, on preconditioned & prefilled arrays*)	**Starter X-Brick**	**1 X-Brick**	**2 X-Brick Cluster**	**4 X-Brick Cluster**	**6 X-Brick Cluster**	**8 X-Brick Cluster**
IOPS 70% read, 30% write (8K blocks)	150,000	150,000	300,000	600,000	900,000	1,200,000
Average Latency (ms)	0.5	0.5	0.5	0.5	0.5	0.5
Max. Bandwidth (GB/s)	3	3	6	12	18	24
Host Connectivity *(Based on number of X-Bricks in the array)*	**Starter X-Brick**	**1 X-Brick**	**2 X-Brick Cluster**	**4 X-Brick Cluster**	**6 X-Brick Cluster**	**8 X-Brick Cluster**
Fibre Channel Ports (8Gbps)	4	4	8	16	24	32
iSCSI Ethernet Ports (10Gbps)	4	4	8	16	24	32

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Management	Starter X-Brick	1 X-Brick	2 X-Brick Cluster	4 X-Brick Cluster	6 X-Brick Cluster	8 X-Brick Cluster
Ethernet Ports (1Gbps)	2	2	4	8	12	16
Management IP Addresses Required	5	5	9	17	25	33
XMS Management Server	A single XMS (physical server or VM) manages multiple XtremIO arrays					

System Capacity (40TB X-Brick)					
	1 X-Brick	2 X-Brick Cluster	4 X-Brick Cluster	6 X-Brick Cluster	8 X-Brick Cluster
Raw Capacity (TB/TiB)	40 / 36.4	80 / 72.8	160 / 145.5	240 / 218.3	320 / 291.0
Usable Capacity[1]	33.6 / 30.6	67.3 / 61.1	134.4 / 122.2	201.5 / 183.3	268.7 / 244.4
Effective Capacity[2]	201.6 / 183.3	403.1 / 366.6	806.2 / 733.2	1,209 / 1,100	1,612 / 1,466

System Capacity (20TB X-Brick)					
	1 X-Brick	2 X-Brick Cluster	4 X-Brick Cluster	6 X-Brick Cluster	8 X-Brick Cluster
Raw Capacity (TB/TiB)	20 / 18.2	40 / 36.4	80 / 72.8	120 / 109.1	160 / 145.5
Usable Capacity[1]	16.7 / 15.2	33.3 / 30.3	66.7 / 60.6	100 / 91	133.3 / 121.3
Effective Capacity[2]	100.2 / 91.2	200.4 / 182.4	400.8 / 363.6	600 / 546	800 / 728

System Capacity (10 TB X-Brick)					
	1 X-Brick	2 X-Brick Cluster	4 X-Brick Cluster	6 X-Brick Cluster	8 X-Brick Cluster
Raw Capacity (TB/TiB)	10 / 9.1	20 / 18.2	40 / 36.4	N/A	N/A
Usable Capacity[1]	8.33 / 7.6	16.7 / 15.2	33.3 / 30.3	N/A	N/A
Effective Capacity[2]	50 / 45.5	100 / 91	200 / 182	N/A	N/A

Starter X-Brick System Capacity (5.2 TB)	
Raw Capacity (TB/TiB)	5.2 / 4.7
Usable Capacity[1]	3.6 / 3.3
Effective Capacity[2]	21.5 / 19.5
Starter X-Bricks may be expanded to 10TB X-Bricks by adding SSDs. They may then be scaled-out to two and four X-Brick clusters.	

In-Memory Space-Efficient Copies	Thousands of space-efficient, writeable copies are supported per cluster, allowing the effective utilization of the array to reach multiple Petabytes.

[1] Usable capacity is the amount of unique, non-compressible data that can be written into the array.
[2] Effective capacity includes the benefits of thin provisioning, inline global deduplication, inline compression, and space-efficient copies. Datasheet numbers are a representative example at 6:1 and will vary based on each customer's specific application environment and use of the XtremIO array.

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Component Specifications

X-Brick Array Controller	
AC Input Voltage	90-264V, 47-63Hz single phase
Rack Space	1U
Dimensions (height x width x depth)	43.2mm x 438mm x 709mm (1.7” x 17.25” x 27.9”)
Weight	18.1kg (40 lbs.)
Power Consumption (typical)	309W
Power Socket Number/Type	2 x IEC C14
X-Brick Disk Array Enclosure (DAE)	
AC Input Voltage	100-240V, 50-60Hz single phase
Rack Space	2U
Dimensions (height x width x depth)	88.9mm x 438mm x 330mm (3.5” x 17.25” x 13”)
Weight	20.4kg (45 lbs.)
Power Consumption (typical)	185W
Power Socket Number/Type	2 x IEC C14
Battery Backup Unit	
AC Input Voltage	160-294V, 50-60Hz
Rack Space	1U
Dimensions (height x width x depth)	43.2mm x 438mm x 556mm (1.7” x 17.2” x 21.9”)
Weight	20kg (44 lbs.)
Power Socket Number/Type	1 x IEC C14
An X-Brick consists of two X-Brick Controllers, one X-Brick DAE, and two Battery Backup Units for each single X-Brick system or one Battery Backup Unit per X-Brick for multi X-Brick systems.	

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Component Specifications

Infiniband Switch (Two Included with Multi X-Brick Systems)	
Ports	18 per switch (36 total)
AC Input Voltage	100-240V, 50-60Hz
Rack Space	2U (two 1U switches) + 1U for cabling
Dimensions (height x width x depth)	43.7mm x 428mm x 627mm (1.72” x 16.84” x 24.7”)
Weight	18.6kg (41.0 lbs.)
Power Consumption (typical)	65W
Power Socket Number/Type	2 x IEC C14
Environmental	
Operating Temperature	10° to 35°C
Non-Operating Temperature	-20° to 50°C
Dimensions (height x width x depth)	20% to 80% (non-condensing)
Operating Relative Humidity	5% to 90% (non-condensing)
Regulatory and Compliance	**RoHS, CE, UL, FCC/EMC**

For More Information

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