

GateStor



Data Systems Corporation



Cloud Storage SP7K[®] Series



GateStor proudly offers SP7K® v1.3-- *the* premiere open systems based storage system solution based on the Legendary patented technology and revolutionary architecture.

The SP7K® is a robust, feature-rich Cloud Storage appliance system in one, optimized for today's best-of-breed COTS gear.

SP7K® storage management system delivers the high-performance, ease-of-use and cost-effectiveness demanded by today's storage users.

Via its native License Manager the SP7K® delivers the flexibility to serve the complete range of storage management needs — from SMB to large enterprise operations — by managing a a rich set of optional and bundled features.





Historically storage vendors offered the market very limited storage management options – low-end Cloud Storage systems, which did not scale as an organizations needs grew, or high-end, expensive Cloud systems, which many small and mid-size organizations were simply priced out of.

SP7K® patented architecture has demonstrated for over 10 years to be the unique in the market on its Virtual Storage memory manager and broadcast technology which reduces the number of data transfers, resulting on outstanding performance many times faster than expensive high end SAN solutions.

Today, however, GateStor proudly leads the shift, offering storage software solutions that span the full range of today's storage management needs - with the features, and at the price-points, demanded by SMB's and large enterprises alike.

SP7K® CLOUD STORAGE Feature Highlights

- RAID on top of RAID architecture for augmenting performance and capacity (RAID 0,1,5,6,50,60,550 and 560)
- Virtual memory management Vs traditional cache
- Up to 512GB of cache memory
- Front-End Connectivity:
 - 6 InfiniBand @ 100 Gb/s ports
 - 6 100/40/10 Gb Ethernet ports
 - 8 16 Gbps FC ports
- Extensive storage Virtualization
- iSCSI, and Block level shared on any of the front end connections

- SSD Drive support as Cache pool
- Back-End drive support
 - SAS 6Gbps 15K RPMs
 - SATA 6Gbps 7.2K RPMs
 - Solid State Drives
- Support for up to 1200 drive configurations on a single unit
- Multiple drive failure support
- **Dynamic Partition Expansion**
- **High Availability Configurations**
- **GUI** for Configuration and Monitoring
- **UPS Support**

Storage Management

- Virtualization of Physical Devices
- Storage Agnostic (SATA, SAS, FC, third party FC storage boxes, etc.)
- Stripe over legacy storage devices

Basic Configurations

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Head Unit Size/Weight (kg. without SSDs)		2U/Net Weight: 35 lbs (15.9kg) Gross Weight: 57 lbs (25.9kg)			
Dimension (W x D x H)(mm)		17.2" (437mm)x 3.5" (89mm) x 24.8" (630mm) 26.5" (W) x 10.5" (H) x 38" (L) (package size)			
Drive Unit Size/Weight (kg. without SSDs)		4	4U/80 lbs (36.3 kg) gross weight		
Dimension (W x D x H)(mm)		7" (178mm) x 17.2" (437mm) x 27.5" (699mm) 26.5" (W) x 10.5" (H) x 38" (L) (package size)			
Processor		S	Support for two Xeon 64bit quad core processors		
RAID Levels		0	0, 1, 3, 5, 6, 50, 60, 550, 560		
Cache		1	16GB, up to 128GB		
Array Stripe Size		4	4K, 8K, 16K, 32K, 64K, 128K		
Model	SP7K-C 200		SP7K-C 400	SP7K-C 600	
Host Channel (Select one or combine up to the max number of ports)	Infiniband 100Gb x 4 10/40/100GbE x 4 FC (16Gb) X 4	1	Infiniband 100Gb x 4 10/40/100 GbE x 4 FC (16Gb) X 6	Infiniband 100Gb x 6 10/40/100 GbE x 6 FC (16Gb) X 8	
Number Of Drives	45 drives basic Up to 180 drives		45 drives basic Up to 315 drives	90 drives basic Up to 1,200 drives	
Number of Solid State Drives in Head Unit for Cache Extension	Four 256GB		Eight 256GB	Twenty 256GB	
Connection Types		FC 16Gbps, InfiniBand 100Gbps, GbE 100Gbps			
Protocols		iSCSI, FCP, IB SRP, IPoIB, CIFS, NFS, iSER			
Virtualized Volume		Can be assigned to any connection types. Switching between different connection types is possible.			

Management Interface Language	English		
iSCSI Port Bonding	Balance-rr, Active-backup, Balance-xor,		
Bonding Mode	Broadcast, Balance-tlb, Balance-alb		
Backplane	SAS supports SES-II, SGPIO		
HDD Bays Interface	SAS / SATA3		
SSD Bays	24 On head Unit		
Capacity	Std. 32TB Max.128TB (1000GB each)		
JBOD Expansion	Up to 8 JBODs		
Write Mode	Write Back / Write Through		
Copy/Mirror/Replication	Local Mirror, Remote Mirror, Remote Replication, Duplication, Volume Copy		
Monitoring	Channel sampling, Volume historical read / write statistic, GUI login / logoff, log, client connections, GbE interface, HDDs status.		
Alert	Alarm type: Mail / LED / Audio Alarm Alarm Trigger: HDD Failure / Fan Failure / Redundant Power Supply / Remote Mirror Broken		
Update	Online Firmware Update / License Update		
Hot-swap Power Supply Head Unit	900W Gold Level hot-swappable redundant power		
Hot-swap Power Supply 45 drive chassis	1400W Gold Level hot-swappable redundant power		
Cooling	4*hot-swappable fan		
Power Source	AC 110V~240V Full Range 50-60Hz		
Operating Temperature	5°C~35°C (41°F~95°F)		
Non-operating Temperature	-20℃~55℃ (-4°F~131°F)		
Operating Humidity	35%~85% (non-condensing)		
Non-operating Humidity	20%~93% (non-condensing)		
OS Support	Windows 7, Windows 8, Windows 10, Windows Server 2008, Windows Server 2013, Redhat Linux, SuSE Linux, AIX, Solaris		

