



## SolidPower 7000<sup>®</sup> SP7K-NVMe<sup>®</sup> Series



# SAN / DASD Storage Solutions

GateStor proudly offers **SP7K-NVMe<sup>®</sup> Series**-- *the* premiere open systems based storage system solution based on the Legendary patented technology and revolutionary architecture and now supporting NVMe drives.

The **SP7K-NVMe<sup>®</sup>** is a robust, feature-rich SAN or Direct Attached Storage appliance system in one, optimized for today's fastest flash storage technology NVMe. The **SP7K-NVMe<sup>®</sup>** has been designed for the most demanding performance applications providing up to **2 Million IOPS**.

**SP7K-NVMe<sup>®</sup>** 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-NVMe<sup>®</sup>** delivers the flexibility to serve the complete range of storage management needs – from SMB to large enterprise operations – by managing a rich set of optional and bundled features.



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

**SP7K-NVMe<sup>®</sup>** patented architecture has demonstrated for over 12 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-NVMe<sup>®</sup> SAN/DASD Feature Highlights

- RAID on top of RAID architecture for augmenting performance and capacity (RAID 0,1,5,6,50,56,550 and 560)
- Virtual memory management Vs traditional cache
- Up to 2TB 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
  - 48 NVMe (Non Volatile Memory Express Solid State Drives)
  - SAS & SATA Solid State Drives
- Support for up to 48 NVMe drives plus option for 240 SAS/SATA/SSD drives
- Multiple drive failure support
- Dynamic Partition Expansion
- High Availability Configurations
- GUI for Configuration and Monitoring
- UPS Support

### Storage Management

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

### Basic Configurations

<b>Head Unit Size/Weight (kg. without SSDs)</b>		2U/Net Weight: 35 lbs (15.9kg) Gross Weight: 57 lbs (25.9kg)	
<b>Dimension (W x D x H)(mm)</b>		17.2" (437mm) x 3.5" (89mm) x 30.2" (767mm) 26.5" (W) x 10.5" (H) x 38" (L) (package size)	
<b>Optional Drive Unit Size/Weight (kg. without Drives)</b>		4U/80 lbs (36.3 kg) gross weight	
<b>Dimension (W x D x H)(mm)</b>		7" (178mm) x 17.2" (437mm) x 27.5" (699mm) 26.5" (W) x 10.5" (H) x 38" (L) (package size)	
<b>Processor</b>		Support for two Xeon 64bit 22 core processors	
<b>RAID Levels</b>		0, 1, 3, 5, 6, 50, 60, JBOD	
<b>Cache</b>		16GB, up to 2TB	
<b>Array Stripe Size</b>		4K, 8K, 16K, 32K, 64K, 128K	
<b>Model</b>	<b>SP7K-NVMe 100</b>	<b>SP7K-NVMe 200</b>	<b>SP7K-NVMe 600</b>
<b>Host Channel</b> (Select one or combine up to the max number of ports)	InfiniBand 100 Gb x 2 10/40/100 GbE x 2 FC (16Gb) X 4	InfiniBand 100 Gb x 4 10/40/100 GbE x 4 FC (16Gb) X 4	InfiniBand 100 Gb x 4 10/40/100 GbE x 4 FC (16Gb) X 4
<b>Number Of Drives</b>	48 NVMe drives	48 NVMe drives Up to 136 drives	48 NVMe drives Up to 288 drives
<b>Number of Standard 10GbE ports</b>	None	Four	Four
<b>Connection Types</b>		FC, InfiniBand 56/100 Gbps, 10/40/100 GbE	
<b>Protocols</b>		iSCSI, FCP, IB SRP, IPoIB, CIFS, NFS, iSER., NVMeoF (NVMe over Fabrics)	
<b>Virtualized Volume</b>		Can be assigned to any connection types. Switching between different connection types is possible.	

# SP7K<sup>®</sup> Features Highlights

<b>Management Interface Language</b>	English
<b>iSCSI Port Bonding Bonding Mode</b>	Balance-rr, Active-backup, Balance-xor, Broadcast, Balance-tlb, Balance-alb
<b>Backplane</b>	SAS supports SES-II, SGPIO
<b>HDD Bays Interface</b>	Head Unit NVMe options SAS / SATA3
<b>NVMe Bays</b>	48 On head Unit
<b>Capacity</b>	NVMe 96TB SAS/SATA 1.9 PB (Petabytes)
<b>JBOD Expansion</b>	Up to 5 JBODs
<b>Write Mode</b>	Write Back / Write Through
<b>Copy/Mirror/Replication</b>	Local Mirror, Remote Mirror, Remote Replication, Duplication, Volume Copy
<b>Monitoring</b>	Channel sampling, Volume historical read / write statistic, GUI login / logoff, log, client connections, GbE interface, HDDs status.
<b>Alert</b>	<b>Alarm type:</b> Mail / LED / Audio Alarm <b>Alarm Trigger:</b> HDD Failure / Fan Failure / Redundant Power Supply / Remote Mirror Broken
<b>Update</b>	Online Firmware Update / License Update
<b>Hot-swap Power Supply Head Unit</b>	1,600W Titanium Level hot-swappable redundant power
<b>Hot-swap Power Supply 45 drive chassis</b>	1400W Gold Level hot-swappable redundant power
<b>Cooling</b>	5*hot-swappable fans
<b>Power Source</b>	AC 110V~240V Full Range 50-60Hz
<b>Operating Temperature</b>	5°C~35°C (41°F~95°F)
<b>Non-operating Temperature</b>	-20°C~55°C (-4°F~131°F)
<b>Operating Humidity</b>	35%~85% (non-condensing)
<b>Non-operating Humidity</b>	20%~93% (non-condensing)
<b>OS Support</b>	Windows 7, Windows 10, Windows 2012, Windows 2016, Redhat Linux, CentOS, SuSE Linux, AIX, Solaris



GateStor Data Systems Corporation

[www.gatestor.com](http://www.gatestor.com)

41 Simon St.  
Nashua, NH 03060