

Disk storage system  
StoreQuant Velocity Scale

StoreQuant DataFusion controller with NVM  
Express



StoreQuant Velocity Scale storage systems offer the following capabilities:

- Resilient and high performance architecture operating 24x7
- Scalable and modular storage architecture with Quality of service support
- Built-in support for workload balancing and performance management
- Support for SCSI T10 SPC-2 and T10 SPC-3
- Support for NVMe over fabrics protocol
- Built-in support for SAN based on Fibre Channel
- Support for Windows, Linux, VMWare ESX, MacOS, FreeBSD
- Flexible storage licensing policy

#### Scalable disk storage architecture

StoreQuant Velocity Scale exploits an innovative flash-optimized architecture that delivers industry-leading economics. Our customers gain a competitive advantage by making optimal use of storage capacity and accelerating IOPs, while providing the enterprise-class availability and scalability your applications demand.

The following features of StoreQuant Velocity Scale are available for use:

- Flexible disk storage upgrade options
- NSPOF (No single point of failure) architecture
- Built-in RAID management and Host management

#### BASE MODULE (DATAFUSION)

- **Form-factor 2U Rack 19'**
- **2 controllers with RAM cache size up to 3000 GB**
- **Remote management «Commander» tool using web UI with HTML5 support**
- **Up to 8 Fiber Channel front-end ports (Front-End) for 2 controllers**
- **Up to 8 Ethernet 100Gb/s ports (Front-End) for 2 controllers**
- **Built-in remote monitoring system**
- **3 year warranty**
- **Additional technical support services ( 8 hours call-to-repair)**



StoreQuant Velocity Scale	
<b>Resilient methods for storage diagnostics</b>	<b>Machine learning algorithms for predictive maintenance (predictions of storage failures)</b>
External interfaces	Ethernet iSCSI 10/40/50/100 Gb/s, Fibre Channel (FC) 2/4/8/16/32 Gb/s
Number of controller	From 2 to 1024
RAM cache (controller)	N*( 8 GB до 1500 GB), где N – number of controllers
RAM speed	DDR4
Maximum number of disk drives supported	10240
Supported disk drive types	2,5'' SSD NVM Express <ul style="list-style-type: none"> <li>● 2 ТБ</li> <li>● 4 ТБ</li> </ul> 3,5'' <ul style="list-style-type: none"> <li>● SAS Nearline 1 ТБ и 2 ТБ (7200 rpm)</li> <li>● SAS Online 600 ГБ, 900 ГБ, 1,2 ТБ и 1,8 ТБ (10 000 rpm)</li> <li>● SAS Online 300 ГБ и 600 ГБ (15 000 rpm)</li> </ul> 2,5'' SSD SAS 480 GB, 960 GB,
Hot swap capabilities for 24x7	Disk drives and all FRUs
Firmware upgrade	Online without downtime
Base software capabilities within standard license	Disk and volume management, SSP (selective storage presentation)
<b>Machine learning algorithms for SAN monitoring</b>	<b>Software feature that monitoring hosts activity</b>
Additional licensed features	AES data encoding
RAID manager	RAID 10, 50, 60
Additional software features	Data compression and deduplication
Management	Built-in web interface UI «Commander»
Warranty	<ul style="list-style-type: none"> <li>● 3-year limited warranty</li> <li>● Customer FRU</li> <li>● Additional support services and remote monitoring and management</li> </ul>



**Velocity Scale RAID manager**

Velocity Scale supports the following RAID configurations: RAID10, RAID50, RAID60. Customer can configure up to 256 disks per one RAID disk group. RAID manager gives the following advantages and provides features:

- Thin Provisioning
- Snapshots / snapclones
- Virtual и COW (Copy on Write) Snapshots
- Remote data replication

**Velocity Scale «Commander» management tool**

HTML5 built-in management tool for remote control and monitoring of Velocity Scale resources.

**Licensing policy**

No licenses required for additional disk storage upgrade.

Таблица 1 – Standard options available for ordering (wo disks)

<b>SQ-FUSION-PLATFORM-X1</b>	4 x controller DataFusion, 96 disk slots (NVMe, SAS), 16xFC 16/32 Gb/s (FE) ports
<b>SQ-FUSION-PLATFORM-X2</b>	8 x controller DataFusion, 192 disk slots (NVMe, SAS), 32xFC 16/32 Gb/s (FE) ports
<b>SQ-FUSION-PLATFORM-X3</b>	16 x controller DataFusion, 384 disk slots (NVMe, SAS), 64xFC 16/32 Gb/s (FE) ports
<b>SQ-FUSION-PLATFORM-X4</b>	32 x controller DataFusion, 768 disk slots (NVMe, SAS), 128xFC 16/32 Gb/s (FE) ports

For sales and technical support and questions please contact us by email [v@storequant.ru](mailto:v@storequant.ru).