

Violin Flash Storage Platform 7600 with Concerto OS 7 Enterprise Data Services

Highlights

Enterprise Data Services

- Thin or Thick Provisioning
- Remote Asynchronous Replication
- Flexible near-zero RPO and RTO
- Application and Crash Consistent Snapshots
- Thin Clones

Simple and Easy Management

- Symphony™ 3 single-pane-of-glass Management UI

Features

- Up to 140 TB raw capacity
- 16 Gb/s Fibre Channel
- 10 Gb/s iSCSI
- Can be operated as a stand-alone array or as a shelf within FSP 7700
- Pay-as-you-grow capacity licensing for non-disruptive growth



Accelerate the most demanding storage workloads with the extreme performance of the Violin® Flash Storage Platform™ 7600. Transform your business through consistent ultra-low latency with sustained high throughput and simple manageability to achieve new levels of application performance and consolidation.

The Flash Storage Platform (FSP) 7600 powered by Concerto™ OS 7 delivers maximum performance for enterprise workloads through consistent low latency (~500 µsecs) with high I/O density (1 million IOPS). The FSP 7600 sets a new industry bar for consolidation through extreme performance, resiliency, and density by delivering 140TB of raw flash in three rack units while enabling dramatically reduced power and cooling expenses.

The FSP 7600 features Enterprise Data Services including business continuity, data protection, and data scalability. The FSP 7600 delivers several benefits:

- Performance that is transformative with capabilities built for demanding enterprise environments
- Flexible and powerful business continuity through asynchronous replication
- Snapshots and Clones that protect valuable enterprise data from accidental corruption
- Application consolidation for lower TCO and simplicity of management
- Data scaling is simple with pay-as-you-grow capacity licensing for low risk, non-disruptive growth
- Configuration choice as either a stand-alone storage array, or as a shelf within the FSP 7700
- Intuitive day-to-day management with Symphony's single-pane-of-glass UI

The FSP 7600 is a performance-optimized solution that delivers highly functional and powerful data services for excellent manageability and data protection. You can deploy the FSP 7600 as a self-contained, SAN connected all-flash array or as a storage shelf within the FSP 7700 for increased scale and business continuity. Concerto OS 7's granular management provides administrators flexibility to respond to unique enterprise requirements. The degree of control available with Concerto OS 7 makes the FSP the safe choice for your high performance storage needs.

Simple and Easy Management

Symphony, Violin's Management Console, is a single-pane-of-glass view into your Violin infrastructure. It provides a single portal through a unified browser-based user interface for one click monitoring and management of Violin Flash Storage Platforms and All Flash Arrays, even if they are geographically distributed across the data center, town or an ocean. Symphony simplifies the storage management experience with user-selectable data services, real-time SLA-based health monitoring, customizable dashboards, and comprehensive reporting, all under centralized management and administration.

The benefits of the FSP 7600 include lower data center TCO, improved application support, reduced management, and consistent end-user SLAs. CFOs will like the FSP for its reduced TCO. CIOs will like it as it frees resources to create new business value. Storage admins will like it as it simplifies data center management. The leader for the all-flash data center is Violin Memory®.

To learn more about how Violin's Flash Storage Platform 7600 can transform your primary storage and data center economics, please contact your Violin Memory representative or visit us at <http://www.violin-memory.com>

Features	Select Configurations of Flash Storage Platform 7600 with Concerto OS 7						
Model	V7600-35	V7600-52	V7600-70	V7600-96	V7600-105	V7600-123	V7600-140
Raw Capacity (TB)	35.2 TB	52.8 TB	70.4 TB	96.7 TB	105.5 TB	123.1 TB	140.7 TB
Maximum Usable Capacity (TB)	22.2 TB	33.3 TB	44.4 TB	60.9 TB	66.5 TB	77.6 TB	88.7 TB
Performance							
Max IOPS	1,000,000 IOPS @ ~500 μ s latency						
Max Bandwidth	4.4 GB/sec						
Min Latency	150 μ s						
Sustained Performance	100% Read: 1,000,000 IOPS @ ~600 μ s 70/30 Read/Write: 750,000 IOPS, under 1 ms , 100% Write: 480,000 IOPS, under 1 ms						
Data Services	Thick and Thin LUNs, Impact Free Application and Storage Consistent Snapshots, Consistency Groups, Full and Thin Clones, Asynchronous Replication, Stretch Cluster and Mirroring with FSP 7700						
Height	3 RU						
Depth	28" / 711 mm						
Width	17.5" / 445 mm						
Weight	93 lbs / 42.2 kg						
Power*	1600 W						
Cooling*	5459 BTU / hr						
Environmental							
Operating Temperature Range	10 to 35 °C (50 to 95 °F)						
Non-Operating Temp. Range	-40 to 70 °C (-40 to 158 °F)						
Humidity Range	8 to 90% (non-condensing)						
Non-Operating Humidity Range	5 to 95% (non-condensing)						
Ecosystem							
Host Connectivity	8x16 Gb Fibre Channel or 8x10 GbE, 2x40 GbE (replication only)						
Certifications / Ecosystem Integration	VMware VAAI, VADP, SRM, Horizon View Proven Storage, VCenter and VASA Plugin, Backup Software Integration, Automated DR Management, Snapshot Director for VM consistent backup and DR, RedHat certified OpenStack support, etc.						
Management Interfaces	2x 10/100/1000 Mbps/sec auto-sensing Ethernet ports (RJ-45), Serial (RS-232) console port for management						
Reliability / Resiliency	Supports Non Disruptive Updates of FW and SW, no single point of failure						
Management	Violin Symphony, CLI: serial, SSH-SNMP, Web GUI, REST XML API						
Regulatory	Safety: IEC/EN 60950, CB Certificate, UL60950-1 CAN/CSA-C22.2 No.60950-1, CE Mark Emissions Class A: EN55022/CISPR 22, FCC Part 15 Class A, ICES-003 Issue 5 Class A, VCCI Class A, AS/NZS CISPR22:2009 Class A BSMI CNS 13438 Class A, Korea RRA Notice No. 2012-13 Class A Immunity: EN55024, EN 61000-4-2,3,4,5,6,8,11 Korea RRA Notice No. 2012-14 RoHS 2011/65/EU, For a full list of specific country approvals, please contact Violin Memory in your country						

*Typical power measurements for Fibre Channel configuration

Model	Available Pay-as-You-Grow Configurations	Capacity Range
V7600-140-2G (2.2 TB x 64 VIMM)	V7600-131-2G, V7600-123-2G, V7600-114-2G, V7600-105-2G, V7600-96-2G	Range: 96 to 140 TB in 3 RU Offered from 96 to 140 TB in capacity license steps of 8.8 TB
V7600-70-1G (1.1 TB x 64 VIMM)	V7600-61-1G, V7600-52-1G, V7600-43-1G, V7600-35-1G	Range: 35 to 70 TB in 3 RU Offered from 35 to 70 TB in capacity license steps of 8.8 TB