



VEXATA VX-100F SCALABLE NVMe FLASH ARRAY

NVMe-based Scalable Data Infrastructure for the Modern Enterprise

As enterprises transform to cloud and mobile business models, database platforms are being pushed to process higher volumes of complex events in real time, add users, and simultaneously run predictive analytics and machine learning on very large datasets.

This puts tremendous pressure on legacy storage arrays to handle larger data volumes without compromising IOPS, throughput, and I/O latency. As enterprises deployed all-flash arrays, they experienced significant performance degradation due to the legacy storage controller architectures.

Enter the Vexata VX-100F Scalable NVMe Flash Array, which delivers over ten times the performance at lower costs than conventional all-flash storage arrays. The VX-100F enables the enterprise to experience massive improvements in application efficiencies and provides the blazing performance needed for machine learning/AI, next generation analytics, and other transactional applications that are used in the transformation to the cognitive era.

The VX-100F supports Fibre Channel attached Non-Volatile Memory Express (NVMe) and NVMe over Fabric (NVMe-oF), giving IT the flexibility required to cost-effectively deploy across a broad number of transactional, AI and analytic use cases.

The VX-100F uses a parallel, high availability architecture with active/active controllers that fully utilize the NVMe flash media. VX-100F delivers outstanding I/O performance, ultra-high throughput with ultra-low latency, 99.9999% availability, enterprise data services, and world-class support at an affordable price point.

The VX-100F supports 3 to 16 hot-swappable storage blades, called Enterprise

Storage Modules (ESMs). Each ESM contains four 3.84TB or 8TB NVMe SSDs, supporting expansion to 512TB of raw capacity in a 6U chassis.

The VX-100F is powered by the Vexata Operating System (VX-OS), delivering advanced data services including thin provisioning, pattern removal, always-on encryption, and space-efficient snapshots and clones. All data at rest is encrypted with Advanced Encryption Standard (AES) 256-bit encryption, which operates without any performance degradation.

The VX-100F uses RAID 5 and RAID 6 data protection, with unparalleled rebuild times on failure compared to conventional all-flash arrays. The VX-100F provides enterprise-class resiliency, high availability, and non-disruptive upgrades (NDU) of software and hardware.

Even under impaired conditions, the VX-100F ensures that access to data is available 99.9999% of the time, while ensuring that the overall performance impact is minimal and there is no disruption to application I/O.

ENTERPRISE USE CASES



ENTERPRISE SOLUTIONS

- High Transaction Databases
- Business Intelligence
- Big Data & Real-Time Analytics
- Machine Learning/AI
- Time-Series Databases

ENTERPRISE FEATURES



RESILIENT

- Active-Active Controller HA
- RAID 5/RAID 6 Protection
- Continuous Operations with 99.9999% Uptime
- Non-Disruptive Upgrades



SIMPLE AND SCALABLE

- NVMe over Fabric (GbE/FC)
- FC or Ethernet Block Interfaces
- Web UI, CLI, RESTful API
- Call Home with Proactive Support



DATA SERVICES

- Thin Provisioning
- Pattern Removal
- Space Efficient Snaps/Clones
- Data at Rest Encryption

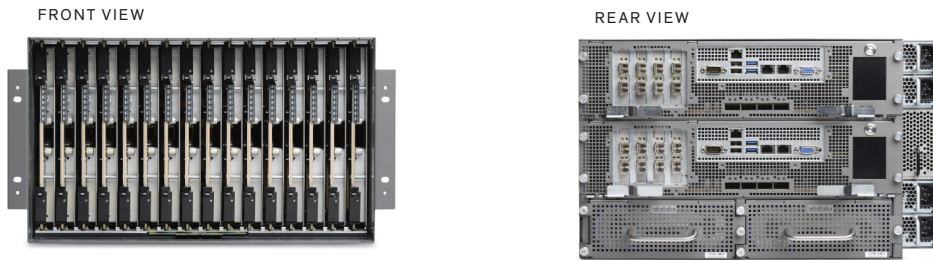


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Vexata VX-100F Scalable NVMe Flash Array - Technical Specifications

VX-100F		
TECHNOLOGY	NVMe-oF	Fibre Channel attached NVMe
CONNECTIVITY	16 × 40Gb/s Ethernet -or- 16 × 32Gb/s Fibre Channel	16 × 32Gb/s Fibre Channel
IOPS*	8+ Million IOPS	7 Million IOPS
THROUGHPUT*	80GB/s (55GB/s R; 25GB/s W)	70GB/s (50GB/s R; 20GB/s W)
LATENCY*	100% Write: 35us 100% Read: 90us	100% Write: 50us 100% Read: 105us
MULTIPATHING SUPPORT	Linux, Windows	All
USABLE CAPACITY (3.84TB)	175TB (RAID 6) - 187.5TB (RAID 5)	
USABLE CAPACITY (8 TB)	406TB (RAID 6) - 435TB (RAID 5)	
RACK SPACE (RU)	6	
MAX POWER CONSUMPTION	2900W (2+2)	
WEIGHT (kg/lbs)	100/220.5	
OS SUPPORT	Linux, Solaris, AIX, HP-UX, Windows, VMware vSphere	
MANAGEMENT	Web UI, CLI and RESTful API	
RESILIENCE	Active-Active High Availability Design, RAID 5 or RAID 6, Hot Swappable ESM blades, Non-Disruptive Upgrades for ESM and IOC modules, Non-Disruptive Capacity and Performance Upgrades	
DATA SERVICES	Thin Provisioning, Space Efficient Snaps and Clones, Pattern Removal, Always-on Encryption with no performance impact	

* Measured under load using multiple test cases (such as VDBench, FIO, Oracle SLOB2)

ABOUT VEXATA:

Founded on the premise that every business is challenged to deliver cognitive, data-intensive applications, Vexata delivers 10x performance AND efficiency improvements at a fraction of the cost of existing all-flash storage solutions. Learn more at www.vexata.com