Quantum

F-SERIES NVMe STORAGE

The Power to 'Re-NVMe' Your Workflow with the Fastest Performance for StorNext



DATASHEET

FEATURES & BENEFITS

Orders of Magnitude Faster than Traditional Flash Storage

NVMe is much faster than traditional flash storage, providing extremely low latency and instant response times for workloads that require a large amount of parallel access.

Reduce Infrastructure Costs and Complexity

Quantum F-Series provides predictable, low-latency access via Fibre Channel or Ethernet, so users can achieve large-system SAN performance with a less expensive Ethernet-based infrastructure.

Meets Performance Requirements in Less Rack Space

A single F2100 system can match the performance of much larger SSD or HDD systems—delivering extreme performance for your users in a much smaller package.

Easily Integrates into a StorNext® File Storage Cluster

StorNext 7 is highly optimized for NVMe storage to deliver shared streaming performance with ease, or create custom storage pools combining NVMe with SSD or HDD storage.

The Quantum F2100 is the newest generation of NVMe storage ready to re-invent your storage workflows with performance that is now twice as fast as the previous generation system—up to 55 GB/s multi-client read performance*—and now offers twice the capacity, as well with up to 384 TB in a single 2U system.

Product Overview

The F2100 is a highly available, high-performing storage server—purpose-built for NVMe with no single point of failure. It is a 2U dual-node server with two hot-swappable compute canisters and 24 dual-ported Gen-4 NVMe drives. Each compute canister can access all 24 NVMe drives, and each compute canister includes processing power, memory, and connectivity specifically designed for the highest performance and availability.

F2100 Front



24 dual-ported NVMe drives Available in four capacities:

- 92.16 TB (24 x 3.84 TB) • 184.32 TB (24 x 7.68 TB)
- 184.32 TB (24 x 7.68 TB) • 368.64 TB (24 x 15.36 TB)
- 737.28 TB (24 x 30.72 TB)

F2100 Rear



Dual-node server with two hot-swappable compute canisters. Each compute canister can access all 24 drives.

Each compute canister includes:

- 2 Intel Xeon Gold 6230 CPUs (32 cores/2 GHz 48 MB cache)
- 192 GB DDR4-2933 (16 GB x 12 slots)
- 2 M.2 Boot Drives (512 GB)
- 2 100 GbE ports (or) 4 FC-32 G ports
- 3 PCle slots

Redundant 2000 W PSUs

The F2100 appliance offers 24 dual-ported NVMe drives and is available in four capacity points (raw):

- 92.16 TB (24 x 3.84 TB)
- 184.32 TB (24 x 7.68 TB)
- 368.64 TB (24 x 15.36 TB)
- 737.28 TB (24 x 30.72 TB)

The new Quantum block storage platform 2.0 software takes full advantage of the latest hardware architecture to deliver that performance and capacity in a dual-controller architecture that is fast to upgrade, and easy to manage.

Both controllers drive the 24 bays of NVMe Flash storage together for efficient load-balancing across your choice of either 4 ports of 100 GbE or 8 ports of 32 Gb Fibre Channel.

LEARN MORE:



Unparalleled Ease of Use

Manage and monitor your system in the interface powered by Quantum Block Storage v2.0 - including throughput, IOPS, logs, and more.



Specification	F2100
Form Factor	2U rack-mounted chassis
Controller Design	Dual redundant active/active hot swappable controllers
Processors	Intel® Xeon® Gold 6230 Processor 32 Cores 2 GHz 48 MB Cache 2 CPUs/Controller
Memory	192 GB (12x 16 GB) DDR4-2933 DIMMs/Controller
Storage Drives	24 NVMe SSD
Drive Capacity Options	30.72 TB, 15.36 TB, 7.68 TB, 3.84 TB
Single System Raw Capacity	737.28 TB, 368.64 TB, 184.32 TB, 92.16 TB
Single System Usable Capacity	612 TB, 306 TB, 153 TB, 77 TB
Connectivity (Ethernet Model)	2x Dual Port 100 Gb Ethernet per Controller (total of 8 ports per system)
Connectivity (Fibre Channel Model)	2x Quad Port 32 Gb Fibre Channel per Controller (total of 16 ports per system)
System Management Connectivity	2x 10GBASE-T per Controller (total of 4 ports per system)
System Management	Integrated IPMI 2.0 + KVM with dedicated LAN
Serviceability	Hot-swappable power supplies Compute canister Drive Modules
Physical Dimensions	Height 3.45" (88 mm) Width 17.58" (446 mm) Depth 32.93" (836 mm) Net Weight: 86.0 lbs (39.1 kg) Gross Weight: 92.6 lbs (42.1 kg)
Power Supply	Two redundant, hot-swappable 2000 W power supply units
Power Supply Input	200 – 240 Vac
Power Supply Certification	Platinum
Operating Temperature	10 °C to 35 °C (50 °F to 95 °F)
Non-Operating Temperature	-40 °C to 60 °C (-40 °F to 158 °F)
Operating Relative Humidity	8% to 85% (non-condensing)
Non-Operating Relative Humidity	8% to 95% (non-condensing)

Quantum

Quantum technology, software, and services provide the solutions that today's organizations need to make video and other unstructured data smarter – so their data works for them and not the other way around. With over 40 years of innovation, Quantum's end-to-end platform is uniquely equipped to orchestrate, protect, and enrich data across its lifecycle, providing enhanced intelligence and actionable insights. Leading organizations in cloud services, entertainment, government, research, education, transportation, and enterprise IT trust Quantum to bring their data to life, because data makes life better, safer, and smarter. Quantum is listed on Nasdaq (QMCO) and the Russell 2000® Index. For more information visit www.quantum.com.

©2022 Quantum Corporation. All rights reserved. Quantum and the Quantum logo are registered trademarks of Quantum Corporation and its affiliates in the United States and/or other countries. All other trademarks are the property of their respective owners.