DATA SHEET

Qumulo Data Storage

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As businesses struggle with the unrelenting growth in unstructured data and how to use this data to unlock business value, they look to IT to provide a smart, flexible and cost-efficient storage infrastructure. IT leaders recognize that, all too often, storage can be the bottleneck in their business. Many of today's legacy storage systems are limited in their ability to scale performance and bridge workloads to the public cloud.

Qumulo provides a complete family of data storage for all your needs when managing your unstructured file data: Persistent Performance, Cached Performance and Active Archive classes.

Qumulo's consistently high-performance Persistent Performance class is designed to use All-NVMe and the very latest commercial, off-the-shelf components, instead of expensive, proprietary hardware. The Persistent Performance class is the leading All-NVMe file storage system on the market. High throughput and incredible low-latency enable unparalleled read and write performance. The Persistent Performance class enables extremely consistent, high performant, and scalable file storage.

Cached Performance class is a unique design with NVMe or SATA SSDs as both read and write cache in front of hard disk drives (HDDs). Built on enterprise-class standard hardware, the Cached Performance class C-72T and C-168T leverage SATA SSD cache while the C-192T and C-432T intelligently leverage NVMe SSD cache to enable the high performance characteristics of flash hardware but at the pricing of spinning disk.

The Active Archive class is the most efficient and performant nearline archive system available. Qumulo's solution has the economics of archive storage, better performance than other nearline storage offerings, and is designed for massive scalability in terms of performance, capacity and the number of files it can manage. The Active Archive class, with its fast read times, makes all of your valuable data, no matter how long it's been archived, immediately available to you.

Across the entire family, each node runs the Qumulo file data platform and participates in the cluster as a fully symmetric peer, managing write and read requests, and coordinating transactions with other nodes within the cluster. Additional nodes can be added to the cluster easily and nondisruptively, linearly scaling both storage capacity and performance. A minimum cluster is four nodes and there are no architectural limits to the number of nodes that can form a cluster.

When multiple clusters are deployed, the clusters can work together to form a globally-distributed but highly connected storage fabric tied together with continuous replication. Clients interact with the storage clusters using industry-standard file protocols (SMB, NFS, FTP or the REST API), and administrators can manage the cluster via a web-based graphical user interface or command-line interface.

Scales to billions of files

Use any mix of large and small files and store as many files as you need. There is no practical limit with Qumulo's file data platform advanced file-system technology. There is no penalty for small files.

Real-time control at scale

Get answers and solve administration problems in real time, no matter how many files and directories you manage.

Persistent Performance

The Qumulo Persistent Performance class, is the leading All-NVMe file storage system on the market. High throughput and incredible low-latency enable unparalleled read and write performance.

Cached Performance

Qumulo's Cached Performance class is the highest performance hybrid file storage system in the data center and in the cloud. The flash-first file data platform leverages Qumulo's machine learning-based predictive caching to ensure most reads are off of flash.

Active Archive

The Active Archive class, with its fast read times, makes all of your valuable data, no matter how long it's been archived, immediately available to you.

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Persistent Performance Class

Per Node	P-23T	P-92T	P-184T	P-368T
Raw Storage Capacity	23 TB	92 TB	184 TB	368 TB
Rack Units	2U			
NVME Drives (hot swappable)	12 x 1.92TB NVMe	24 x 3.84TB NVMe	24 X 7.68TB NVMe	24 X 15.36TB NVMe
Connectivity Ports	4 x 100GbE (QSFP28)			
Management Ports	1GbE Base-T (RJ45)			
CPU	2 x Intel Gold 6126, 12 cores, 2.6Ghz			
Memory	192GB			
Power Supply	2 x 1100W (fully redundant, hot-swappable)			
Dimensions	3.5" (8.9cm) x 17.2" (43.7cm) x 29" (73.7cm)			
Weight	60lbs (27.22kg)			
Power Requirements	100 – 240V, 50/60hz			
Typical Power Consumption	450W			
Typical Thermal Rating	650W (VA), 2,218 BTU/hr			
Maximum Power Consumption	3.55A @ 240V, 7.73A @ 110V			
Maximum Thermal Rating	2,218W (VA), 2,900 BTU/hr Operating Temperature			
Operating Temperature	50° F – 95° F (10° C – 35° C)			
Non-operating Temperature	-40° F – 158° F (-40° C – 70° C)			
Operating Relative Humidity	8% to 90% (non-condensing)			
Non-operating Relative Humidity	5% to 95% (non-condensing)			

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Cached Performance Class

Per Node	C-72T	C-168T	C-192T	C-432T
Raw Storage Capacity	72TB	168TB	192TB	432TB
Rack Units	1U		2U	
HDD Drives (hot swappable)	12 x 6TB HDD	12 x 14TB HDD	24 x 8TB HDD	24 x 18TB
SSD Drives (hot swappable)	4 x 480GB SSD	4 x 960GB SSD	-----	-----
NVMe Drives (hot swappable)	-----	-----	6 NVMe x 1.6TB	6 NVMe x 3.2TB
Connectivity Ports	2 x 25GbE (SFP28)		2 x 100GbE (QSFP28)	
Management Ports	1GbE Base-T (RJ45)			
CPU	Intel® Xeon-D D-1531 SOC, 6 cores, 2.2GHz		AMD 7282 12 cores 2.6 GHz	
Memory	64GB		128GB	
Power Supply	2 x 400W Platinum PSU (fully redundant, hot swappable)		2 x 600W Dual power supply (fully redundant, hot-swappable)	
Dimensions	1.7" (4.3 cm) x 17.2" (43.7cm) x 36.25" (92.1cm)		3.2" (8.1cm) x 17.3" (43.9cm) x 33.1" (84.1cm)	
Weight	63lbs (28.6kg)		94lbs (42.6337kg)	93lbs (42.1841kg)
Power Requirements	100 – 240V, 50/60hz		100 – 240V, 50/60hz	
Typical Power Consumption	0.59A @ 240V, 1.29A @ 110V		1.6 A @ 240V, 3.5 A @ 110V	1.33 A @ 240V, 3.46 A @ 110V
Typical Thermal Rating	142W (VA), 484 BTU/hr		385 W (VA), 1314 BTU/hr	318 W (VA), 1085 BTU/hr
Maximum Power Consumption	1.0A @ 240V, 2.18A @ 110V		2.44 A @ 240V, 5.32 A @ 110V	1.9 A @ 240V, 4.15 A @ 110V
Maximum Thermal Rating	240W (VA), 818 BTU/hr		585 W (VA), 1996 BTU/hr	456 W (VA), 1556 BTU/hr
Operating Temperature	41° F – 95° F (5° C – 35° C)		50° F – 95° F (10° C – 35° C)	
Non-operating Temperature	-40° F – 149° F (-40° C – 65° C)		-40° F – 158 ° F (-40° C – 70° C)	
Operating Relative Humidity	8% to 90% (non-condensing)			
Non-operating Relative Humidity	5% to 95% (non-condensing)			

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Active Archived Class

Per Node	K-144T	K-168T
Raw Storage Capacity	144TB	168TB
Rack Units	1U	
HDD Drives (hot swappable)	12 x 12TB HDD	12 x 14TB HDD
SSD Drives (hot swappable)	3 x 800GB SSD	3 x 960GB SSD
Connectivity Ports	2 x dual 10GbE (SFP+)	
Management Ports	10GbE base-T (RJ45)	
CPU	Intel® Xeon-D D-1531 SOC, 6 cores, 2.2GHz	
Memory	64GB	
Power Supply	2 x 400W (fully redundant, hot-swappable)	
Dimensions	1.7" (4.3cm) x 17.2" (43.7cm) x 36.25" (92.1cm)	
Weight	63lbs (28.6kg)	
Power Requirements	100 – 240V, 50/60hz	
Typical Power Consumption	0.59A @ 240V, 1.29A @ 110V	
Typical Thermal Rating	142W (VA), 484 BTU/h	
Maximum Power Consumption	1.0A @ 240V, 2.18A @ 110V	
Maximum Thermal Rating	240W (VA), 818 BTU/hr	
Operating Temperature	41°F to 95°F (5°C to 35°C)	
Non-operating Temperature	-40°F to 149°F (-40°C to 65°C)	
Operating Relative Humidity	8% to 90% (non-condensing)	
Non-operating Relative Humidity	5% to 95% (non-condensing)	

Certifications

Safety	UL, cUL
Country	FCC (USA), NRTL (USA and Canada)
Emissions	FCC Part 15 Class A, ICES-003 Class A
Immunity	North America

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