## Quantum.

# ACTIVESCALE Z200 ALL-FLASH OBJECT STORAGE

High-Performance, Durable Data Access for High-Speed Ingest and Analysis



**DATASHEET** 

#### **FEATURES & BENEFITS**

#### Fast Time to Insight and Discovery

S3-compatible, NVMe-based scale-out object storage powers fast access to billions of objects of any size for I/O intensive and high throughput workloads.

#### Accelerated Al, ML, Data Analytics

High performance data access for analytical workflows and AI pipelines from data preparation and modeling to training and maintenance.

#### Simple to Scale and Manage

Seamlessly grow from terabytes to exabytes with consistent performance at any scale without rebalancing.

#### Highly Available, Durable, and Secure

Fully redundant design with wide stripe erasure coding, strong data consistency, and data encryption for secure, non-stop operations.

#### For Lakes, Clouds, and Archives

Localized ingest, flexible solid-state storage usage across both data and metadata, and 3GEO geospreading enables low-cost, highly durable data lakes, storage clouds, and cold archives, easily accessed for ongoing analysis.

## All-Flash Performance at Any Scale

Quantum ActiveScale® object storage has long been recognized for high durability, availability, and reliability at any scale, from terabytes to exabytes, in support of secondary storage applications including backup, archiving, and long-term data retention. With the ActiveScale Z200, ActiveScale expands its reach with outstanding performance for demanding transactional and high throughput workloads.

Delivered in an optimized 1U form factor with 10 solid-state drives, the Z200 is an all-flash, object storage server based on the latest generation of ActiveScale software. The Z200 supports all standard ActiveScale features, including the ActiveScale scale-out architecture; adding Z200 servers seamlessly grows system capacity and performance to any scale, from terabytes to exabytes.

## For Al, Machine Learning, and Analytics Workloads

The ActiveScale Z200 provides high-performance analysis of object data sets at any scale to help customers achieve faster time to insight, discovery, and innovation. The Z200 meets the needs for a variety of demanding workloads that require high speed data ingest, high throughput access to data, fast data restoration, transactional access to large numbers of small objects, and/or the management of massive object counts, for example, with large cold storage archives. The Z200 brings ActiveScale simplicity and performance to artificial intelligence, machine learning, and data analytics workloads across emerging use cases in manufacturing, healthcare, federal intelligence, and media and entertainment.

## Efficient Data Management Across the Entire Data Lifecycle

With support of ActiveScale Cold Storage, the ActiveScale Z200 not only provides high performance for object-based analysis, but also provides a highly optimized solution to ingest and host petabyte to exabyte-scale cold archives. With its high throughput and flexibility to densely store metadata for billions of objects in flash, plus its integrated ability to durably store massive amounts of data in nearline tape storage, the ActiveScale Z200 reduces the overall cost of data lakes, storage clouds, and long-term archives, and enables easy data access to massive data sets for additional analysis, model recalibration, and re-monetization.

Feature	ActiveScale Z200
Form factor	1U10 – 1 RU
Drives	15.36, 30.72 <sup>3</sup> , 61.44 <sup>3</sup> TB NVMe SSD
Client connectivity	2 x 10/25 Gb
Width	17.2 in (43.7 cm)
Height	1.7 in (4.3 cm)
Depth	23.5 in (59.7 cm)
Configuration weight (kg/lbs)	13.02 kg/28.7 lbs
Power consumption – typical/max (W)	0.46/0.54 KW
Power supplies	100 – 240 VAC
	ActiveScale Z200 Scale-Out
Min/max number of nodes	3 nodes (3U) / Unlimited
Min/max raw disk capacity	460.8 TB (30 x 15.36 TB SSD) / Unlimited
Min/max licensed Active capacity (S3 Standard)	100 TB / Unlimited
Min/max ActiveScale Cold Storage (S3 Glacier)	1 PB (optional) / Unlimited
Min/max client connectivity	6 x 10/25 Gb / Unlimited
Max object counts for min/max configs	50 Billion <sup>1</sup> (3 nodes) / Unlimited
Maximum multi-part object size	50 TB
	ActiveScale Software
Operating system software	ActiveScale OS 7.x
Storage classes	Active (S3 Standard-compatible), Cold (S3 Glacier-compatible)
Access protocols	RESTful S3, NFS v3
Management interfaces	ActiveScale SM Real-time System Management Console, CLI, RESTful API, ActiveScale View
System analytics	Quantum Cloud-Based Analytics (CBA) storage analytics service, Prometheus Monitoring, Alerting, Exporting to Grafana
Security	Data encryption in flight SSL/TLS using AES-256, Data encryption at rest using AES-256, FIPS 140-2 certified (optional) <sup>2</sup>
Management services	User accounts, Authentication, IAM, Quotas, Notification Services, Active and Cold Storage Class Management, Lifecycle Policies
Data protection	Strong/Immediate Consistency, Advanced Active and Cold Erasure Coding, Dynamic Data Placement, Versioning, Object Locking, 3GEO Geospreading, Replication
Data durability	Up to 19 nines for both Active and Cold Storage Classes
HW/SW/FW upgrades	Non-disruptive rolling upgrades and seamless system expansion

<sup>&</sup>lt;sup>1</sup> Massive object counts for Z200 most relevant to ActiveScale Cold Storage configurations; assumes 100 TBs NVMe storage for storing objects.

# Quantum

Quantum delivers end-to-end data management solutions designed for the Al era. With over four decades of experience, our data platform has allowed customers to extract the maximum value from their unique, unstructured data. From high-performance ingest that powers Al applications and demanding data-intensive workloads, to massive, durable data lakes to fuel Al models, Quantum delivers the most comprehensive and cost-efficient solutions. Leading organizations in life sciences, government, media and entertainment, research, and industrial technology trust Quantum with their most valuable asset – their data. Quantum is listed on Nasdaq (QMCO). For more information visit <a href="https://www.quantum.com">www.quantum.com</a>.

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<sup>&</sup>lt;sup>2</sup> Contact Quantum for details.

<sup>&</sup>lt;sup>3</sup> Contact Quantum for availability.