Quantum

ACTIVESCALETM

ACHIEVE SECURITY, RESILIENCY, AND ACCESSIBILITY OF YOUR DATA AT SCALE



DATASHEET

FEATURES & BENEFITS

Extreme Data Durability

Data protection with Dynamic Data Placement and Repair places objects across storage units for highest resiliency and ongoing monitoring and repair of errors.

Easy to Scale

Start small and increase capacity in line with data growth.

System Availability

Geo-spread system design efficiently disperses object chunks across 3 locations and ensures accessibility in case of a disaster.

Data Security

Object lock delivers immutability to accommodate compliance requirements and protect data from ransomware attacks.

Data Integrity

Advanced erasure coding, versioning, and dynamic monitoring and repair ensures data put in will be data read out years later.

Capacity and Performance Efficient

Sustained performance with large and small files without compromising on utilization.

APPLICATIONS/ENVIRONMENTS

Cloud Service Providers

- Backup-as-a-Service
- Storage-as-a-Service

Media & Entertainment

- Production Media Archive
- On-premises S3 Media Target

Life Sciences and Health Care

- Genome data banks
- Medical imaging

Backup and Archive

- Tape consolidation
- Active data repository

Analytic Storage Tier

- Data lake repository

A gigabyte of data represents a drawing, a terabyte of data represents a genome, combined, these gigabytes and terabytes equate to ever increasing amounts of data that is rarely deleted. The data growth and retention trends are driving demands for more efficient, resilient, and secure storage solutions. ActiveScaleTM software delivers accessibility of data at scale.

MANAGE AT SCALE WITH EASE

ActiveScale software enables your environment to scale from 452 TB raw to 74 PB in a scale-out configuration. Adding more capacity is seamless; as new clusters of nodes are added to the system, capacity is added to the pool and the dynamic data placement algorithm balances data placement and makes capacity available to applications.

ActiveScale presents a standard S3-compliant object interface.

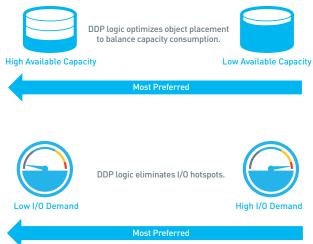
SECURE DATA

All security threats may not be addressed with a single tool; ActiveScale supports keyless encryption of data at rest to prevent access via unauthorized applications. Object Lock makes objects immutable; once set, immutability can't be modified even by an administrator, making data safe from ransomware attacks. The system may be partitioned into buckets and different protection policies may be applied to align with the security requirements.

KNOW YOUR DATA WILL BE ACCESSIBLE AND AVAILABLE TODAY AND INTO THE FUTURE

Outstanding data availability and data integrity are essential for a world-class

infrastructure. ActiveScale supports configurations where data is dispersed across three locations for extreme availability with ActiveScale's dynamic data placement technology (DDP), an advanced erasure code alternative to RAID. Even with a full data center outage, the 3-site configuration delivers continuous data availability and operations. In addition, ActiveScale's proactive data repair provides high data integrity with data verification performed in the background.



PREDICTABLE PERFORMANCE

ActiveScale can deliver gigabytes per second throughput as the environment scales. Based on network connections and the number of drives deployed, performance is consistent and predictable.

LEARN MORE:

	P100E3	P100	X100
Capacity ¹	•		
Base unit capacity options (raw)	432 TB	864 TB	1,008 TB
Max capacity (raw)	1,008 TB	27.2 PB	74 PB
Base unit max objects	235 M	600 M	714 M
Max objects	470 M	16.2 B	45 B
Maximum multi-part object size	50 TB		
Software			
Operating system software	ActiveScale OS 5.7		
Management interfaces	Real-time System Management Console, CLI, RESTful API		
System analytics	ActiveScale CM, a cloud-based storage analytics service		
Security	Data encryption in flight SSL/TLS using AES-256, Data encryption at rest using AES-256		
Data protection	Advanced Erasure Coding, Dynamic Data Placement, Versioning, Object Locking		
Data durability	Up to 19 nines		
SW/FW upgrades	Non-disruptive rolling upgrades		
Client Connectivity			
Base unit network ports	6	6	6
Max network ports	12	54	54
Protocols	RESTful S3, NFS v3		
Base Unit Physical size			
Space Requirements	3 RU	12 RU	Rack size: 2,060 x 600 x 1,200 mm (81 x 23.6 x 52.6 in)
Configuration weight (kg/lbs)	96 kg/210 lbs	274 kg/605 lbs	1,010 kg/2,457 lbs
Base Unit Power			
Power consumption – typical/max (W)	0.69/0.76 KW	1.85/2.03 KW	6.37/7.45 KW
Power consumption – typical/max (KVA)	0.70/0.77 KVA	1.89/2.06 KVA	6.5/7.6 KVA
Power characteristics	208-240 V, single-phase or three-phase with redundancy and intelligent power		

¹ One MB is equal to one million bytes, one GB is equal to one billion bytes, one TB equals 1,000 GB (one trillion bytes), and one PB equals 1,000 TB when referring to storage capacity. Usable capacity will vary from the raw capacity due to object storage methodologies and other factors.

Quantum.

Quantum technology and services help customers capture, create, and share digital content—and preserve and protect it for decades at the lowest cost. Quantum's platforms provide the fastest performance for high-resolution video, images, and industrial IoT, with solutions built for every stage of the data lifecycle, from high-performance ingest to real-time collaboration and analysis and low-cost archiving. Every day the world's leading entertainment companies, sports franchises, research scientists, government agencies, enterprises, and cloud providers are making the world happier, safer, and smarter on Quantum. See how at www.quantum.com.

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