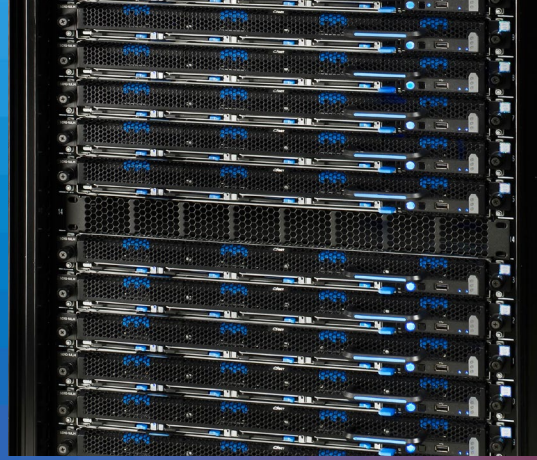


Quantum

ACTIVESCALE™ X100

MASSIVELY SCALABLE, HIGHLY DURABLE OBJECT STORAGE THAT IS EASY-TO-MANAGE AT SCALE



DATASHEET

FEATURES & BENEFITS

Ready to Deploy

Power and network connections are all that is needed.

Easy to Scale

Increase capacity in line with data growth by scale-up or scale-out.

Extreme Data Durability

Data protection with BitDynamics, BitSpread, versioning and advanced erasure coding.

System Availability

Geo-spread system design protects data without replication.

Excellent TCO

Low acquisition cost, power/TB, and operating costs.

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

The ActiveScale™ X100 system is an integrated object storage solution that allows you to scale video and other unstructured data up from 1,176 TB to 8.23 PB (raw) and scale out to over 74 PB (raw), so you can easily keep up with data growth and deliver on business objectives. For large-scale data that requires extreme data durability with easy and fast retrieval, the ActiveScale system is designed to facilitate "Data Forever" architecture for investment protection and ease of operation.

SIMPLE TO INSTALL AND USE

The ActiveScale X100 system addresses the challenges of a DIY approach by delivering an integrated system that can be up and running quickly. Each system is vertically integrated with software, networking, and hardware. Once installed in your data center, the system presents an Amazon S3™-compliant object interface. Management for large-scale storage requires real-time system tools like ActiveScale SM and a cloud-based storage analytics tool, ActiveScale CM for effective and efficient management.

EXTREME SCALABILITY

Start with the base configuration and as storage requirements grow, simply add scale-up modules to increase capacity. Each rack delivers up to 6 GB/sec throughput for high productivity. The ActiveScale X100 system also supports scale-out for up to nine racks delivering a raw capacity of over 74 PB. Grow your system without re-balancing and avoid forklift upgrades with dynamic data placement. IT staff no longer needs to buy ahead of consumption capacity, and can better match budget and capacity needs.

OUTSTANDING AVAILABILITY AND DURABILITY

Outstanding data availability and data integrity are essential for a world-class cloud infrastructure. The ActiveScale X100 system can be configured across three locations to disperse data for extreme availability with patented BitSpread® technology, a rateless erasure code alternative to RAID. Even with a full data center outage, the 3-site configuration delivers continuous data availability for continuous operations. In addition, BitDynamics™ provides high data integrity with data verification performed in the background. For protection against ransomware attacks, object versioning provides the ability to recover data before intrusion.

EASE OF INTEGRATION

When combined with Quantum StorNext® appliances, the ActiveScale X100 can be integrated into high-performance workflow environments, simply added as NAS-connected storage for easy integration, or a combination of these as part of a comprehensive storage infrastructure. Scale, cost management, content protection and workflow integration can now be addressed via a single pane of glass.

LEARN MORE:

www.quantum.com/object-storage

TECHNICAL SPECIFICATIONS

	Base Configuration	Scale-up Module	Standard (Base+6 Scale-up Modules)
Capacity¹			
Configuration capacity (raw/usable)	1,176 TB	1,176 TB	8,232 TB
Maximum multi-part object size	50 TB		
Software			
Operating system software	ActiveScale OS 5.x		
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	BitSpread: Advanced Rateless Erasure Coding + Dynamic Data Placement		
SW/FW upgrades	Non-disruptive rolling upgrades		
Characteristics			
Performance	Client throughput performance up to 6 GB/sec		
Data durability	Up to 19 nines		
Connectivity			
Protocols	RESTful S3		
Client connectivity	60 Gbps/base (6x10 Gb/sec)		
Physical size²			
Rack dimensions (mm/in)	2060 x 600 x 1200 mm (81 x 23.6 x 52.6 in)		
Configuration weight (kg/lbs)	713 kg/1,572 lbs		1,010 kg/2,457 lbs
Power			
Power consumption – typical/max (W)	2.45/3.72 KW	0.65 KW	6.37/7.45 KW
Power consumption – typical/max (KVA)	2.5/3.8 KVA	0.67 KVA	6.5/7.6 KVA
Power characteristics	208-240 V, single-phase or three-phase with redundancy and intelligent power		
Environmental²			
Cooling	Redundant high-efficiency fans		
Temperature range – operating (C, F)	10 °C to 35 °C (50 °F to 95 °F) derated 1 °C per 300 m over 960 m altitude increase		
Temperature range – non-operating	-40 °C to 66 °C (-40 °F to 151 °F) derated 1 °C per 300 m over 3,000 m altitude increase		
Humidity	8% to 90% (non-condensing)		
Compliance	FCC/IES-003, CE, VCCI, CISPR 22, CISPR 24, KN22, KN24, EN60950-1 2nd edition, UL60950-1 2nd edition		
BTUs/hr (typical/max)	6.31/6.92 K BTU/h	4.70/5.15 K BTU/h	15.71/17.22 K BTU/h
Carbon footprint (max)	0.001 Metric Tons	0.001 Metric Tons	0.003 Metric Tons

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.

² Environmental data shown is for the full configuration only.



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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