

Quantum

# ACTIVESCALE™ P100

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



## DATASHEET

### FEATURES & BENEFITS

#### Easy to Deploy

Rack space, power, and network connections are all that is needed.

#### Easy to Scale

Increase capacity with both scale-up and scale-out configurations.

#### Extreme Data Durability

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

#### System Availability

Geo-spread system protects data without replication.

#### Excellent TCO

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

#### Storage Management

ActiveScale SM & CM manage your entire namespace for efficient petabyte-scale storage management.

### APPLICATIONS/ENVIRONMENTS

#### 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

#### Cloud Service Providers

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

The ActiveScale™ P100 is a modular object storage system that allows you to scale out or geo-spread video and other unstructured data to 27 PB (raw), so you can easily keep up with data growth, your storage management needs, and deliver on business objectives. For large-scale data that requires long-term retention with easy and fast retrieval, the ActiveScale P100 is designed to facilitate a "Data Forever" architecture for investment protection and ease of operation.

#### SIMPLE TO INSTALL AND USE

For large-scale data, the ActiveScale P100 presents an Amazon S3™-compliant object interface that can easily integrate with existing S3-aware applications. Real-time system management is provided by ActiveScale SM which manages your entire namespace, not just one rack, and combined with ActiveScale CM cloud-based analytics which provides historical and predictive capabilities to better manage large-scale storage efficiently and effectively.

#### SIMPLE SCALABILITY

The ActiveScale P100 is based on a modular storage node architecture that starts with 1,008 terabytes (TB) of raw storage and scales up in increments of 1,008 TB to over 3 PB. Additionally, the system can scale out or geo-spread to over 27 PB (raw). Each system delivers up to 8 GB/sec throughput for high productivity. Grow your system without re-balancing and avoid forklift upgrades with dynamic data placement. IT staff can easily add capacity and performance to keep up with high data growth rates, and manage it with ease.

#### OUTSTANDING AVAILABILITY AND DURABILITY

Advanced data availability and integrity are essential for a world-class cloud infrastructure. The ActiveScale P100 can be deployed in a 3-site configuration to geographically disperse data for extreme availability. Even with a data center outage, the 3-site configuration delivers continuous data availability for uninterrupted operations. Data durability comes from patented BitSpread® technology. In addition, BitDynamics™ provides high data integrity using background verification and assurance. For ransomware attacks, object versioning provides the ability to quickly recover data to minimize impact.

#### EASE OF INTEGRATION

When combined with Quantum StorNext® appliances, the ActiveScale P100 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](http://www.quantum.com/object-storage)

# TECHNICAL SPECIFICATIONS

	Base Configuration	Scale-up Module	Standard (Base+2 Scale-up Modules)
<b>Capacity<sup>1</sup></b>			
Configuration capacity (raw/usable)	1,008 TB	1,008 TB	3.02 PB
Maximum multi-part object size	50 TB		
<b>Software</b>			
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 (AES-256)		
Data protection	BitSpread: Advanced Erasure Coding and Dynamic Data Placement		
SW/FW upgrades	Non-disruptive rolling upgrades		
<b>Characteristics</b>			
Performance	Client throughput performance up to 8 GB/sec		
Data durability	Up to 19 nines		
<b>Connectivity</b>			
Protocols	RESTful S3		
Client connectivity	60 Gbps/base (6x10 Gb/sec)		
<b>Physical size<sup>2</sup></b>			
Rack space requirements (rack units)	12RU	6RU	24RU
Configuration weight (kg/lbs)	274 kg/605 lbs	191 kg/421 lbs	656 kg/1,447 lbs
<b>Power</b>			
Power consumption – typical/max (W)	1.85/2.03 KW	1.38/1.51 KW	4.61/5.08 KW
Power consumption – typical/max (KVA)	1.89/2.06 KVA	1.39/1.53 KVA	4.67/5.12 KVA
Power characteristics	208-240 V, single-phase or three-phase with redundancy and intelligent power		
<b>Environmental<sup>2</sup></b>			
Cooling	Redundant high-efficiency fans		
Temperature range – operating	5 °C to 35 °C		
Temperature range – non-operating	-40 °C to 65 °C		
Humidity	8% to 90% (non-condensing)		
Compliance	FCC/ICES-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

<sup>1</sup> 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.

<sup>2</sup> Rack not included, customer must supply rack and PDU.



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](http://www.quantum.com).

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