

# Quantum®

# Lattus X100



## > DATASHEET

### Infinite. Online. Durable. Cost Effective.

The Lattus™ X100 system is an integrated object storage solution that allows you to scale up from 840 TB to 5.8 PB (raw) and scale out to over 52 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 Lattus system is designed to facilitate “Data Forever” architecture for investment protection and ease of operation.

#### SIMPLE TO INSTALL AND USE

The Lattus 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 Lattus X100 system also supports scale-out for up to nine racks delivering a raw capacity of over 52 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 Lattus 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. Finally, the Lattus system features strong consistency, in contrast with weak consistency found in many other object storage systems; you don't have to worry about stale data impacting business decisions.

#### EASE OF INTEGRATION

When combined with Quantum StorNext® appliances, the Lattus 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.

## 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

> **LEARN MORE:**  
[www.quantum.com/lattus](http://www.quantum.com/lattus)

# SPECIFICATIONS

	Base Configuration	Scale-up Module	Standard (Base+6 Scale-up Modules)
<b>Capacity<sup>1</sup></b>			
Configuration capacity (raw/usable)	840 TB	840 TB	5,880 TB
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 using AES-256		
Data protection	BitSpread: Advanced Rateless Erasure Coding + Dynamic Data Placement		
SW/FW upgrades	Non-disruptive rolling upgrades		
<b>Characteristics</b>			
Performance	Client throughput performance up to 6 GB/sec		
Data durability	Up to 17 nines (99.99999999999999%)		
<b>Connectivity</b>			
Protocols	RESTful S3		
Client connectivity	60 Gbps/base (6x10 Gb/sec)		
<b>Physical size</b>			
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		1,010kg/2,457 lbs
<b>Power</b>			
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		
<b>Environmental</b>			
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	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> Environmental data shown is for the full configuration only.

## ABOUT QUANTUM

Quantum is a leading expert in scale-out storage, archive, and data protection, providing solutions for capturing, sharing, and preserving digital assets over the entire data lifecycle. From small businesses to major enterprises, more than 100,000 customers have trusted Quantum to address their most demanding data workflow challenges. Quantum's end-to-end, tiered storage foundation enables customers to maximize the value of their data by making it accessible whenever and wherever needed, retaining it indefinitely and reducing total cost and complexity. See how at [www.quantum.com/customerstories](http://www.quantum.com/customerstories).