Efficient, Intelligent, Enterprise-Scale Tape Storage

Massive growth of unstructured data is challenging IT organizations across all industries. The sheer scale of data under management and its rapid growth rate is requiring new levels of storage efficiency. Organizations are realizing the best approach is an intelligent, multi-tiered storage solution that balances performance and cost, and scales easily while providing users with simple access to all their stored content. As the lowest-cost storage technology, tape is playing an important role in these new solutions. Scalar® i6 provides the most efficient, lowest-cost storage solution for these demanding workflow environments.

**DATA INTEGRITY AND SECURITY**
Policy-based data integrity checks are automated with the Extended Data Life Management (EDLM) feature, ensuring stored content remains readable. With intelligent data management applications like Quantum’s StorNext®, suspect tapes can have content migrated automatically to a new tape, creating a self-healing archive. And in-library vaulting provides protected long-term storage in the security of the customer’s data center. Additional security features like AES 256-bit encryption and media removal notifications ensure valuable content is protected from unauthorized access.

**SCALABILITY**
A modular design simplifies scalability for managing growth. Each Scalar i6 module supports up to three full-height LTO tape drives and 100 storage slots, for up to 1.5PB of storage per module. Capacity-on-Demand (CoD) slot licensing in 25-slot increments provides small granularity to better manage your storage costs in a pay-as-you-grow approach, with capacity scaling from 750TB up to 12PB within a single 19-inch rack.

**HIGH EFFICIENCY**
Scalar i6 delivers best-in-class storage density with up to 12PB in a single 19-inch rack, minimizing valuable data center footprint. 80 PLUS®-certified power supplies require the lowest power and cooling, further minimizing ongoing operating costs, while iLayer™ software features like Proactive Diagnostics and RESTful web services save valuable library administration time.

**DATA INTEGRITY AND SECURITY**
Best-in-Class Storage Density
Saves valuable data center footprint with up to 12PB in a single 19-inch rack.

Extended Data Life Management (EDLM)
Ensures stored data remains readable with automated integrity checks.

Active Vault
Secure in-library vaulting saves cost, increases security, and simplifies access to vaulted content.

Capacity-on-Demand Growth
Simplifies growth by scaling quickly and easily, without disruption.

Proactive Monitoring and Diagnostics
Maximizes library uptime by resolving issues before they impact operations.

80 PLUS®-Certified Power Supplies
High-efficiency, green power supplies minimize power and cooling costs.

Advanced Reporting
Media, drive, and media security reports help manage system resources, improve security, and improve budget and planning. Automated report scheduling and distribution save time.

High Availability Features
Redundant power supplies and path failover prevent downtime in the event of failure.

Proactive Monitoring and Diagnostics
Ensures the entire system stays running smoothly; provides guided steps to resolve issues often before failures occur.

Encryption Key Management
FIPS-validated solution with KMIP support makes it easy to manage keys, mitigating risk of lost data. AES 256-bit encryption standard for highest levels of security.

LEAR MORE:
www.quantum.com/scalar
CAPACITY Configurations

SYSTEM CAPACITY

<table>
<thead>
<tr>
<th>No. of Modules</th>
<th>Form Factor</th>
<th>Max Slots</th>
<th>Max Drives</th>
<th>LTO-6</th>
<th>LTO-7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>TB</td>
<td>PB</td>
</tr>
<tr>
<td>1 (1CM)</td>
<td>6U</td>
<td>100</td>
<td>3</td>
<td>625</td>
<td>0.6</td>
</tr>
<tr>
<td>2 (1CM, 1EM)</td>
<td>12U</td>
<td>200</td>
<td>6</td>
<td>1,250</td>
<td>1.25</td>
</tr>
<tr>
<td>3 (1CM, 2EM)</td>
<td>18U</td>
<td>300</td>
<td>9</td>
<td>1,875</td>
<td>1.9</td>
</tr>
<tr>
<td>4 (1CM, 3EM)</td>
<td>24U</td>
<td>400</td>
<td>12</td>
<td>2,500</td>
<td>2.5</td>
</tr>
<tr>
<td>5 (1CM, 4EM)</td>
<td>30U</td>
<td>500</td>
<td>15</td>
<td>3,125</td>
<td>3.1</td>
</tr>
<tr>
<td>6 (1CM, 5EM)</td>
<td>34U</td>
<td>600</td>
<td>18</td>
<td>3,750</td>
<td>3.75</td>
</tr>
<tr>
<td>7 (1CM, 6EM)</td>
<td>42U</td>
<td>700</td>
<td>21</td>
<td>4,375</td>
<td>4.4</td>
</tr>
<tr>
<td>8 (1CM, 7EM)</td>
<td>48U</td>
<td>800</td>
<td>24</td>
<td>5,000</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Minimum capacity is 50 slots; additional slots can be activated with a Capacity-on-Demand (COD) license.
*Assumes 2.5:1 compression

OPERATION

Interface Options: 8Gb fibre channel for library control and data; 1GbE for management
Inventory Speeds: Ranges from approx. 1 min to 6 min. depending on configuration
Firmware Updates: Customers can choose to have automatic checks for firmware updates, to ensure use of the latest library and drive code levels.
Configuration: Auto-discovery and auto-calibration for installed/added components (modules, tapes, drives, magazines, etc.)
Library Partitioning: Supports up to 15 partitions
Import/Export: Configurable, 0-50 in 5-slot increments for every module

RELIABILITY

Library MSBF: Greater than 2,000,000
Library MTTR: 30 minutes
Power: Optional 2N power
Diagnostics: Proactive diagnostics embedded within the library monitor major subsystems; runs self-diagnostic procedures, and policy-based communications to system administrators
Module Upgrade: Any module may be added in less than 30 minutes; all components are customer-installable.

PHYSICAL

<table>
<thead>
<tr>
<th>Module</th>
<th>HxWxD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Module</td>
<td>10.4&quot; x 17.4&quot; x 36.4&quot; (26.5cm x 44.1cm x 92.45cm)</td>
</tr>
<tr>
<td>Expansion Module</td>
<td>10.4&quot; x 17.4&quot; x 36.4&quot; (26.3cm x 44.1cm x 92.45cm)</td>
</tr>
</tbody>
</table>

RACK INSTALLATION REQUIREMENTS

• Library must be installed in a standard 19-inch four-post rack enclosure
• Minimum rack depth is 42.13 inches (1070 mm)

SOFTWARE COMPATIBILITY


COMPLIANCE AND CERTIFICATION

Safety Standards: IEC60950 with worldwide country deviations
Immunity Standards: EN55024, KN 35
International Certifications: CE (Europe), VCCI (Japan), TUV/DS (Germany), FCC (USA), ICES (Canada), cTUVus (USA & Canada), EAC (EuroAsian Conformity Mark), KCC (Korea), BSMI (Taiwan)

ENVIRONMENTAL

Electrical: 100-240 VAC, 50-60Hz
Power: 80 PLUS certified power supplies
Temperature: 16 to 35°C operating
Humidity: 20 to 80% non-condensing operating

DRIVE CAPACITY AND PERFORMANCE

<table>
<thead>
<tr>
<th>Drive Type</th>
<th>Cartridge Capacity Native/Compressed* (TB)</th>
<th>Drive Throughput Native/Compressed* (MB/sec)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LTO-7</td>
<td>6.0 / 15.0</td>
<td>300 / 750</td>
</tr>
<tr>
<td>LTO-6</td>
<td>2.5 / 6.25</td>
<td>160 / 400</td>
</tr>
</tbody>
</table>

*LTO-7 and LTO-4 tape drives support encryption and LTFS.
*Assumes 2.5:1 compression

ADVANCED FEATURES

EDLM: Automated, policy-based data integrity checks
Active Vault: In-library media vaulting
Path Failover: Control Path and Data Path Failover

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.

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