



SPECTRA Stack

Modern Storage for Today's Data Center

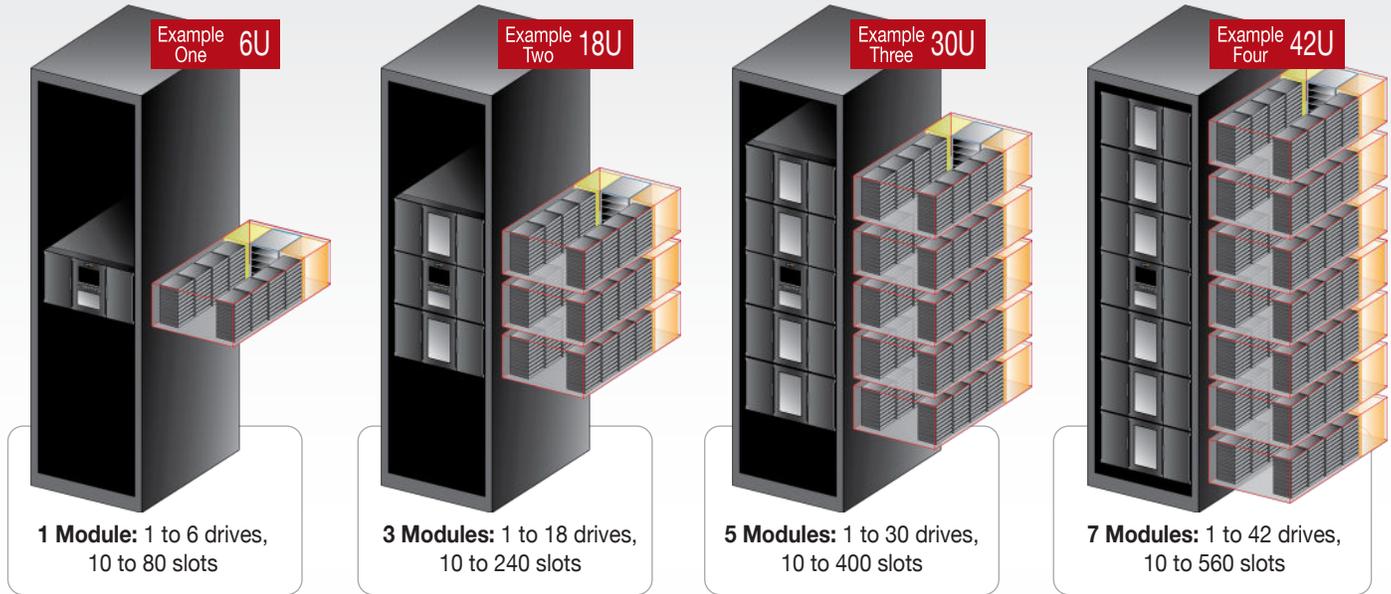
Built with maximum flexibility at its core, the Spectra® Stack tape library will meet your backup, archive, and perpetual storage requirements. Designed to be easily installed, expanded and managed, the Spectra Stack is rated at a 100% duty cycle – meaning it is one of the only stackable libraries built to perform in a 24/7 environment.

Each module of the Spectra Stack holds 10 to 80 LTO tape slots and 1 to 6 tape drives and is scalable to 7 modules with a maximum of 560 tape slots and 42 tape drives. Users can store more than 10 PB (25.2 PB compressed*) of data in a single 19-inch NEMA rack with a fully expanded Spectra Stack library. This extreme flexibility provides affordability and scalability without compromise.

The Spectra Stack Tape Library sets a new standard for simple and easy scalability

The Spectra Stack offers superior flexibility on many levels, supporting both full-height and half-height tape drives; multiple generations of LTO tape drives (LTO-5, LTO-6, LTO-7, LTO-8, LTO-9); and multiple generations of LTO media (LTO-3, LTO-4, LTO-5, LTO-6, LTO-7, LTO-7 Type M, LTO-8 and LTO-9) all in a standard 19-inch equipment rack. Purchase what you need today and not what you will need tomorrow, which means capacity on demand is now a reality.

Adding an expansion module allows up to 80 additional slots and up to 6 additional drives, easily growing to 7 modules in a single rack. Upgrading is EASY and FAST — expansion units are out-of-the-box and configured in under 30 minutes.



Smooth, reliable operation that's cost effective for any enterprise



Loading ten tapes at a time



Loading 40 tapes at a time

Your data is critical to your business, but it can be expensive to store all your data. Tape is known for its affordability and Spectra Stack utilizes LTO tape media, a high-capacity tape storage technology designed for dependability and cost effectiveness. It's a powerful, scalable and adaptable tape format that addresses the exponential data growth and storage challenges organizations face today – at the most affordable cost per GB in the industry. For as low as 1 cent per gigabyte, Spectra Stack delivers an extremely reasonable data storage option.

Designed for a full duty-cycle environment, the Spectra Stack is a reliable archive- and backup-ready library. The Spectra Stack library reduces your total cost of storage and provides operational expense reductions through space-efficient designs, intelligent scaling, compression, and reduced management overhead.

Spectra Stack management software

Easy to use and manage, the library's management software provides a similar feature set as the rest of the Spectra tape library family, including an intuitive color touchscreen, remote web interface, ability to create partitions (up to 20), built-in diagnostics, media lifecycle management, encryption, and encryption key management. An optional SpectraVision web camera can be mounted on top of the library to provide a visual assessment of all robotics and interior components.



Convenient front panel color touchscreen



Remote web interface for computer

View of robotics from optional web cam

Efficient data migration capabilities

Both Spectra and the Spectra Stack library make any migration plan seamless. Tape is designed for long-term data storage, but too often users are required to sacrifice their existing investment in tape drives when they move to a new tape library. Spectra Stack's MigrationPassSM eliminates the need to make that costly decision. MigrationPass starts with the unique ability to migrate your existing tape drives and media into the Spectra Stack library. It also includes a program to help you migrate to newer LTO generations as they are released. This unprecedented offering protects user investment while providing a truly open approach to working with a technology designed for multi-generation use.

Maintaining access to existing applications is fairly straightforward when migrating from one tape library to another, but what happens when you need to migrate from the data application itself? How is the metadata transferred? How are competing applications maintained in the same system simultaneously? Spectra's Professional Services team supports thousands of users with these issues on a regular basis. Let our experts guide you through the process.



Spectra Certified Media is vastly superior

Our commitment to you is making tape pain-free through Spectra Certified Media. From manufacturer selection to packaging and customer shipment, every step of the Spectra Certified Media manufacturing process is designed to ensure you have the most reliable and automated tape storage available. No other supplier places as much emphasis on continual enhancements and features that simplify all aspects of the media management process.



Broad Application Support: Share a Stack with multiple applications

Compatibility is essential when deploying new tape technology. The Spectra Stack supports all industry-standard operating systems and major backup applications allowing users the ability run up to 20 applications at the same time with partitioning. Investment protection has a whole new meaning when Spectra Stack is selected, with the ability to integrate existing LTO tape drives into your new library and maintain access to your applications and data.

Traditional Storage: All major backup and archiving applications are integrated with Spectra Stack.



Object Storage with Spectra BlackPearl[®] and Spectra Stack Tape

In addition to being the perfect solution for traditional storage, Spectra Stack is also fully integrated with Spectra's BlackPearl Converged Storage System, meaning it can easily become part of an object storage solution. One of the only object storage tape solutions on the market, the combination of Spectra Stack and BlackPearl assures that this solution will continue to grow with business demands. It's the perfect offload of Tier 1 storage as well as being a backup or offload for cloud environments. The LTF5 tape format ensures that data is easily interchangeable with other systems – eliminating vendor lock in.

Object Storage: Easily implemented with the BlackPearl and the Spectra Stack Tape Library. Both are designed to efficiently fit into any workflow with all major data movers.



Spectra Stack Product Specifications

| No. of Modules | Form Factor | Max Slots | Maximum Capacity | | | | | | | |
|------------------|-------------|-----------|------------------|-------------|---------------|-------------|-----------------|-------------|---------------|-------------|
| | | | LTO-9 | | LTO-8 | | LTO-7 Type M*** | | LTO-7 | |
| | | | Native | Compressed† | Native | Compressed† | Native | Compressed† | Native | Compressed† |
| 1 (1 CM*) | 6U | 80 | 1.44 PB | 3.6 PB | 960 TB | 2.4 PB | 720 TB | 1.8 PB | 480 TB | 1.2 PB |
| 2 (1 CM, 1 EM**) | 12U | 160 | 2.88 PB | 7.2 PB | 1.9 PB | 4.8 PB | 1.4 PB | 3.6 PB | 960 TB | 2.4 PB |
| 3 (1 CM, 2 EM) | 18U | 240 | 4.32 PB | 10.8 PB | 2.8 PB | 7.2 PB | 2.1 PB | 5.4 P | 1.4 PB | 3.6 PB |
| 4 (1 CM, 3 EM) | 24U | 320 | 5.76 PB | 14.4 PB | 3.8 PB | 9.6 PB | 2.8 PB | 7.2 PB | 1.9 PB | 4.8 PB |
| 5 (1 CM, 4 EM) | 30U | 400 | 7.20 PB | 18 PB | 4.8 PB | 12.0 PB | 3.6 PB | 9.0 PB | 2.4 PB | 6.0 PB |
| 6 (1 CM, 5 EM) | 36U | 480 | 8.64 PB | 21.6 PB | 5.7 PB | 14.4 PB | 4.3 PB | 10.8 PB | 2.8 PB | 7.2 PB |
| 7 (1 CM, 6 EM) | 42U | 560 | 10.08 PB | 25.2 PB | 6.7 PB | 16.8 PB | 5.0 PB | 12.6 PB | 3.3 PB | 8.4 PB |

| No. of Modules | Form Factor | Max Drives | Maximum Performance – TB/Hr | | | | | | | |
|------------------|-------------|--------------|-----------------------------|-------------|-------------------|-------------|-------------------|-------------|-------------------|-------------|
| | | | LTO-9 | | | | LTO-8 | | | |
| | | | Full Height Drive | | Half Height Drive | | Full Height Drive | | Half Height Drive | |
| | | | Native | Compressed† | Native | Compressed† | Native | Compressed† | Native | Compressed† |
| 1 (1 CM*) | 6U | 6 HH, 3 FH | 4.32 | 10.80 | 6.48 | 15.12 | 3.89 | 8.10 | 6.48 | 15.12 |
| 2 (1 CM, 1 EM**) | 12U | 12 HH, 6 FH | 8.64 | 21.60 | 12.96 | 30.24 | 7.78 | 16.20 | 12.96 | 30.24 |
| 3 (1 CM, 2 EM) | 18U | 18 HH, 9 FH | 12.96 | 32.40 | 19.44 | 45.36 | 11.66 | 24.30 | 19.44 | 45.36 |
| 4 (1 CM, 3 EM) | 24U | 24 HH, 12 FH | 17.28 | 43.20 | 25.92 | 60.48 | 15.55 | 32.40 | 25.92 | 60.48 |
| 5 (1 CM, 4 EM) | 30U | 30 HH, 15 FH | 21.60 | 54.00 | 32.40 | 75.60 | 19.44 | 40.50 | 32.40 | 75.60 |
| 6 (1 CM, 5 EM) | 36U | 36 HH, 18 FH | 25.92 | 64.80 | 38.88 | 90.72 | 23.33 | 48.60 | 38.88 | 90.72 |
| 7 (1 CM, 6 EM) | 42U | 42 HH, 21 FH | 30.24 | 75.60 | 45.36 | 113.4 | 27.22 | 56.70 | 45.36 | 113.4 |

*Controller Module **Expansion Module ***New, unused LTO-7 generation tapes can be initialized as LTO-7 Type M media †Assumes 2.5:1 compression Specifications subject to change without notice

Tape Media Capacity

LTO-6 = 2.5TB Native / 6.25TB Compressed
LTO-7 = 6TB Native / 15TB Compressed
LTO-7 Type M = 9TB Native / 22.5TB Compressed
LTO-8 = 12TB Native / 30TB Compressed
LTO-9 = 18TB Native / 45TB Compressed

Drive Performance

LTO-7 = HH Native 300MB/Sec, Compressed 700MB/Sec
 FH Native 300MB/Sec, Compressed 750MB/Sec
LTO-8 = HH Native 300MB/Sec, Compressed 700MB/Sec
 FH Native 360MB/Sec, Compressed 750MB/Sec
LTO-9 = HH Native 300MB/Sec, Compressed 700MB/Sec
 FH Native 400MB/Sec, Compressed 900MB/Sec

Reliability: Spectra Stack is rated at 3 million MCBF
Low Power Consumption: 100-240v AC, 50/60Hz
Dimensions: EIA standard 19-inch NEMA rack

LTO Drive Connectivity:
 Half-height drives support Fibre and SAS
 Full-height drives support Fibre

SpectraGuard Support

Support for Spectra Stack ranges from our standard worldwide next-business-day replacement to more advanced alternatives, including same day, four-hour onsite service. Spectra's exclusive optional Assisted Self Maintenance (ASM) kits are available to users who desire onsite, user replaceable, spare parts including – tape drives, power supplies, library controller module, and tape robot.

Our expertise comes from over four decades of solving real problems with hands-on lab work and onsite technical support. And Spectra's PriceLock guarantee means we will never up-charge a customer for support beyond the normal cost of inflation.

SPECTRAGUARD®
 Worldwide Support



About Spectra Logic Corporation

Spectra Logic develops a full range of Attack Hardened™ data management and data storage solutions for a multi-cloud world. Dedicated solely to data storage innovation for more than 40 years, Spectra Logic helps organizations modernize their IT infrastructures and protect and preserve their data with a broad portfolio of solutions that enable them to manage, migrate, store and preserve business data long-term, along with features to make them ransomware resilient, whether on-premises, in a single cloud, across multiple clouds, or in all locations at once. To learn more, visit www.spectralogic.com.

