

DON'T COMPROMISE: RELIABILITY

Optimal reliability and up-time lets you trust the Spectra T120 library. Using a modular ninth-generation design, the affordable T120 is equipped with user-serviceable components so that in the rare occurrence of a failure, downtime is minimized.

DON'T COMPROMISE ON TECHNICAL SUPPORT: GET SPECTRAGUARD SUPPORT

SpectraGuard technical support offers a menu of options to choose from, so you can customize support to match your requirements. Options include worldwide on-site support, next business day, and four-hour response. In addition, you may want to select Assisted Self Maintenance (ASM) that stores on your site a set of easy-to-swap components, including power supplies, drives, controllers, and robotics. The T120 AutoSupport feature integrates support into your library, automatically creating an e-mail message, ready to send to SpectraGuard staff, outlining details of an issue whenever one arises. The T120 supplies a range of diagnostic options, including a built-in Ethernet port for remote diagnostics. Don't compromise on support: with the T120 you have a library you can count on and SpectraGuard support's on-time or free guarantee.



SPECTRA SOLUTIONS

ANATOMY OF SOLUTION

COMPANY: NASA Langley Research Center

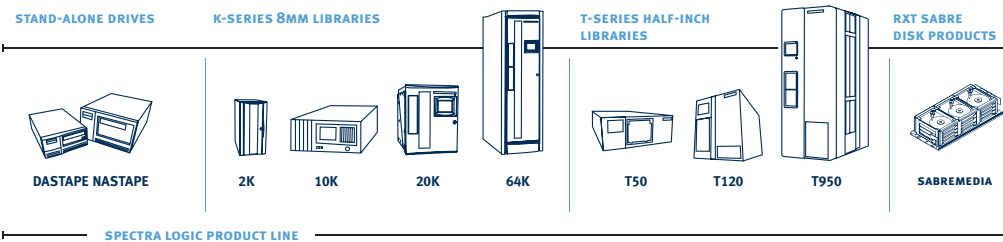
PROBLEM: NASA needed a fast, high-density tape library to store data from its January 2004 Spirit mission to reference and help guide the Opportunity mission occurring just weeks later.

SOLUTION: NASA chose a Spectra tape library with LTO tape drives to backup space, aircraft and other scientific data, including trajectory data from the January 2004 MER mission.

RESULTS: Analysis of Spirit's descent and landing on Mars contributed to a decision by flight controllers to program Opportunity to open its parachute higher than had been planned earlier. The analysis depended on data stored securely on a Spectra T-series library.



MARS EXPLORATION ROVER



ENTERPRISE-CLASS FEATURES ARE STANDARD ON THE AFFORDABLE MID-RANGE T120:

- Most data in the least space — highest density in the industry at 96 TB LTO-3 and 156 TB SAIT-1 in 14U
- Easy to use — a color touch screen with intuitive graphics
- Connectivity — for each partition, choose whether to cable using a Fibre Channel or Gigabit Ethernet controller, or using direct-attach Fibre Channel or SCSI
- Easy to maintain — the library tells you when it's time for library maintenance
- Easy to keep it up and running — with easy-to-swap modules, you can change out components without affecting backups
- Sized to fit your data center — rack-mount
- Easy to secure — password-protected users and multiple levels of security, so only the right user can use the right features
- Grows with your data — expanding to over 120 slots and 6 drives, the T120 can keep up with expanding data, protecting your investment
- Integrated support for BlueScale encryption — the federal standard AES-256 algorithm
- Adapts to your data center as your data grows — from the wide palette of options, add features, drives, controllers and more, many software-key enabled
- Visit Spectra Logic's Web site, www.spectralogic.com, for a video on the library's use and more about the T120
- Certified media — available through the Spectra Logic Web site, www.spectralogic.com
- Reduces overhead in managing media — handle media in TeraPack magazines, not one by one
- Eases media handling — use the bar codes on the TeraPack magazines and cartridges to track data even outside the library
- Capacity on Demand — need capacity? Simply go to www.spectralogic.com, purchase slots, and use the immediately supplied software key to instantly access newly licensed slots

INTERFACES

- Direct-Attach Fibre Channel
- Direct-Attach LVD SCSI
- Fibre Channel QIP
- Static WWN
- Redundant ports/Failover
- Port consolidation
- Gigabit Ethernet/iSCSI QIP
- Redundant ports/Failover
- Port consolidation
- TOE (TCP/IP Onboard Engine)

RELIABILITY STATS

Mean Cycles Between Failures (MCBF)	over 1 million MCBF
Mean Time Between Failures (MTBF)	250,000 power-on hours
Mean Time to Repair (MTTR)	3 minutes for hot swap components, 30 minutes average for non-hot swap components

COMPATIBILITY CHART

Spectra Logic products work with the following industry leaders and more:

BakBone	IBM HPSS	Cisco	Dantz
CommVault	Computer Associates	EMC	IBM Tivoli
Legato	Masstech	Backup Exec	Microsoft
Network Appliance	Syncsort	Veritas	Xiotech

DRIVES	THROUGHPUT / TB/HOUR		TAPES	CAPACITY TB	
	LTO-3 NATIVE/COMPRESSED	SAIT-1 NATIVE/COMPRESSED		LTO-3 NATIVE/COMPRESSED	SAIT-1 NATIVE/COMPRESSED
2	.576 / 1.152	.216 / .5616	30	12 / 24	15 / 90
3	.864 / 1.728	.324 / .8424	45	18 / 36	22.5 / 58.5
4	1.152 / 2.304	.432 / 1.1232	60	24 / 48	30 / 78
5	1.44 / 2.88	.54 / 1.404	90	36 / 72	45 / 117
6	1.728 / 3.456	.648 / 1.6848	120	48 / 96	60 / 156

Single LTO-3 tape capacity is 400 GB native/800 GB compressed and drive throughput is 80MB/second native and 160MB/second compressed
 Single SAIT-1 tape capacity is 500 GB native/ 1.3 TB compressed and drive throughput is 30 MB/second native and 78 MB/second compressed

SPECIFICATIONS

Height	14U
Maximum storage cartridges	120
EE cartridges (minimum)	8
Weight (loaded approximate)	262 lb/119 kg
Power Consumption	9.4 Amps @120 VAC Max config. 50/60 Hz

SPECTRA LOGIC'S SATISFIED CUSTOMERS INCLUDE:

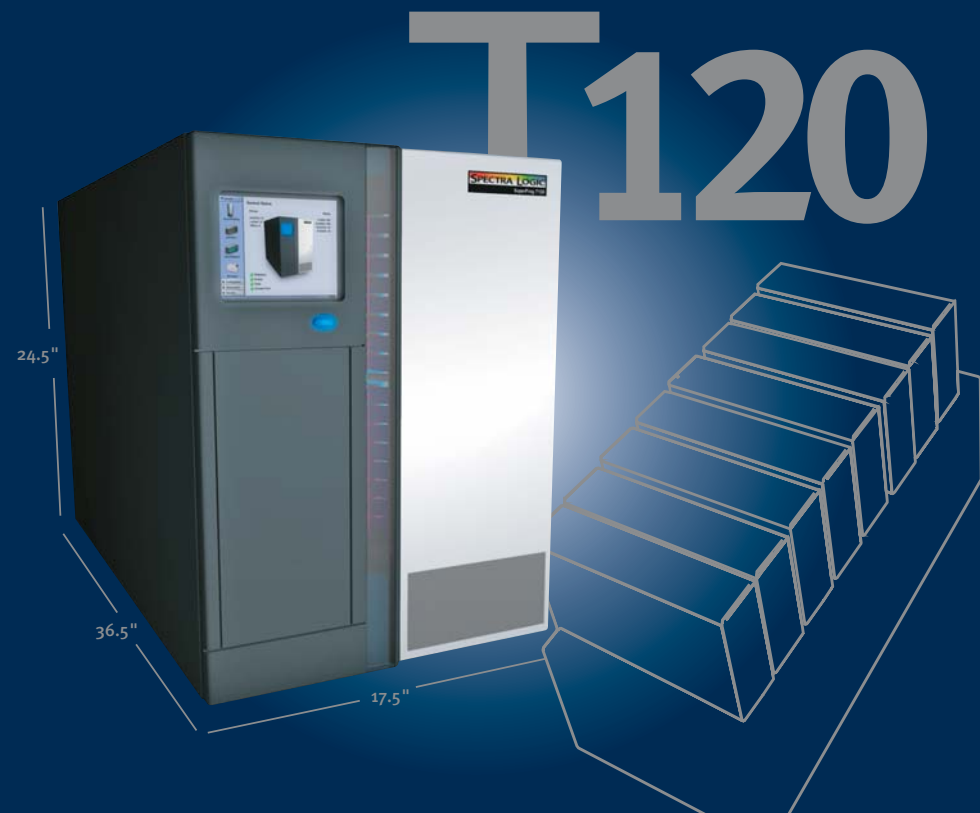
- APPLE COMPUTER
 - AT&T
 - BANCO DEL PORTUGAL
 - BANK OF AMERICA
 - CENTER FOR DISEASE CONTROL
 - EBAY
 - HITACHI
 - IBM
 - KENNEDY SPACE CENTER
 - LSU MEDICAL CENTER
 - MICROSOFT - INDIA
 - NASA
 - RICOH
 - SASK ENERGY
 - SIEMENS AUTOMOTIVE
 - THE GOLF CHANNEL
 - TOYS "R" US
 - UNIVERSITY OF CHICAGO
- Check www.SpectraLogic.com for customer profiles.

SPECTRA LOGIC is a leading designer and manufacturer of data protection products for companies worldwide. Spectra Logic was the first in the industry to offer portable RXT RAID, automate AIT and to offer native Fibre Channel connectivity and iSCSI in a library. Currently, Spectra Logic has thousands of libraries installed worldwide. Visit www.SpectraLogic.com for more information.

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WWW.SPECTRALOGIC.COM/T120

- ✓ **LOWEST TOTAL COST OF OWNERSHIP: MASSIVE SCALABILITY, EASILY UPGRADABLE**
- ✓ **MOST DATA IN THE LEAST SPACE: UP TO 156 TB IN 24.5 IN/62 CM/14U**
- ✓ **MOST FLEXIBILITY: GIGABIT ETHERNET/iSCSI, SCSI, FIBRE CHANNEL; LTO AND/OR SAIT MEDIA**
- ✓ **EASIEST TO MAINTAIN AND UPGRADE: SLIDE-IN COMPONENTS, HOT-SWAP DRIVES, REDUNDANT POWER SUPPLY**
- ✓ **EASIEST TO USE: MANAGE FROM ANYWHERE WITH WEB BROWSER LOGIN; TOUCH-SCREEN FRONT PANEL**
- ✓ **BEST DATA PROTECTION PROVIDING INTEGRATED HARDWARE-BASED ENCRYPTION**

✓ **AFFORDABLE STORAGE WITHOUT COMPROMISE**

CHANGING THE WORLD OF STORAGE

T120revD



SPECTRA® T120: AFFORDABLE STORAGE WITHOUT COMPROMISE

DON'T COMPROMISE: CHOOSE THE SPECTRA T120 TAPE LIBRARY

The T120 library gives you an unmatched selection of features, along with enterprise-class reliability and management, all in an affordable mid-range library. You don't need to sacrifice sophistication, performance, or options to get a library sized to suit your current needs that can grow with your organization. The Spectra T120 library helps you get the most done, automatically, affordably, and easily.

UNMATCHED VERSATILITY

Invest in only the features you actually need. You don't have to purchase a package of features when you only need or want a few. The Spectra T120 gives you unmatched versatility in designing your own, affordable library uniquely suited to your data storage requirements. You can always add more features to match evolving requirements, protecting your data and your investment.

EASY TO MANAGE—LOCAL OR REMOTE

One of the problems within a data center is learning to use the wide range of software applications and hardware units that protect your data. The T120 addresses the problem directly with its extremely intuitive graphical interface on the front of the library. The interface is displayed on a color touch screen and the identical interface is also available on remote systems using a browser. This interface is used across the family of Spectra libraries, including Spectra's enterprise library, the T950.

FRONT PANEL & REMOTE BROWSER



STOP JUGGLING CARTRIDGES: STORE, PROTECT, AND TRACK THEM USING BAR-CODED TERAPACK CASES

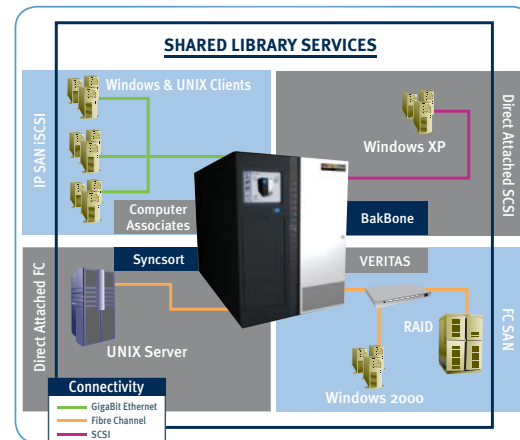
One problem that seems outside the scope of an automated library is handling and managing the high quantity of tape cartridges storing your data. The Spectra Logic libraries, including the T120, have addressed this problem with a technically elegant solution: a data cartridge pack. Each pack, called a TeraPack® magazine, has a dust cover and a unique bar code, so that you can track a set of media outside the library. TeraPack magazines protect media and lower overall operational costs, since less labor is required manage media. TeraPack magazines also fit securely into fire-resistant cases for use on your or off-site locations, such as Iron Mountain.



FIRE-RESISTANT CASE & TERAPACK MAGAZINE

CHOOSE ONE LIBRARY THAT ACTS LIKE MANY: SLS PARTITIONING AND MIXED MEDIA

Some sites have data that requires isolation from other data sets, or its own backup rules and media. If this describes your data, select the Shared Library Services (SLS) option. This option lets you partition the library so that, to the outside storage environment, the T120 looks like multiple libraries. With SLS, multiple applications can access the T120 using mixed media and without complex external partitioning servers, network connections, and proprietary client software.

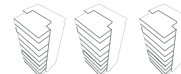


FITS RIGHT INTO YOUR STORAGE ENVIRONMENT: MULTIPLE CONNECTIVITY CHOICES

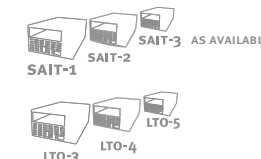
Choose the connectivity options that best suit your data center: either direct-attach or Spectra Logic's Quad Interface Processors (QIP). The Gigabit Ethernet QIP supplies TOE (TCP/IP Off-load Engine). TOE lets Ethernet protocols run at speeds that rival Fibre Channel.

- Fibre Channel QIP
- Gigabit Ethernet/iSCSI QIP
- Direct-attach Fibre Channel
- Direct-attach SCSI

UPGRADE CAPACITY AND THROUGHPUT
30 SLOTS AND ONE DRIVE TO
120 SLOTS AND 6 DRIVES



UPGRADE PERFORMANCE
ADD MORE DRIVES, AND
UPGRADE TO FASTER AND HIGHER CAPACITY
MODELS AS THEY BECOME AVAILABLE



UPGRADE CONNECTIVITY
DIRECT-ATTACH FIBRE CHANNEL
DIRECT-ATTACH SCSI
FIBRE CHANNEL QIP
GIGABIT ETHERNET (iSCSI) QIP



BLUESCALE
bluescale innovation

The Spectra T120 library is built on multiple generations of Spectra Logic hardware and software technology. It shares a core set of high-end features with Spectra Logic's T-series libraries, including multiple library management software and secure access to partitions by authorized users only. The field-proven architecture common to these libraries is called Spectra's BlueScale™ environment.

POWERED BY bluescale

FEATURES	SPECTRA T120		ADIC SCALAR 100	DELL 136T	IBM 3583	OVERLAND NEO 4100	HP MSL6060	QUALSTAR TLS88132	QUANTUM M2500	QUANTUM PX510	STK SL500
	● FULL IMPLEMENTATION	◐ PARTIAL IMPLEMENTATION	◑ NO IMPLEMENTATION								
SAN-READY DESIGN:	●	◐	◑	◑	◑	◑	◑	◑	◑	◑	◑
▶ TRUE HOT SWAP	●	◐	◑	◑	◑	◑	◑	◑	◑	◑	◑
▶ 6 DRIVES VIA ONE FC CONNECTION	●	◐	◑	◑	◑	◑	◑	◑	◑	◑	◑
▶ NATIVE FC DRIVES	●	◐	◑	◑	◑	◑	◑	◑	◑	◑	◑
BAR-CODED TERAPACK® CASES	●	◐	◑	◑	◑	◑	◑	◑	◑	◑	◑
COLOR TOUCH SCREEN	●	◐	◑	◑	◑	◑	◑	◑	◑	◑	◑
REMOTE MANAGEMENT	●	◐	◑	◑	◑	◑	◑	◑	◑	◑	◑
SINGLE SCREEN MULTIPLE UNIT MANAGEMENT (OBSERVATORY)	●	◐	◑	◑	◑	◑	◑	◑	◑	◑	◑
DUAL AC INPUT	●	◐	◑	◑	◑	◑	◑	◑	◑	◑	◑
HIGHEST DENSITY	●	◐	◑	◑	◑	◑	◑	◑	◑	◑	◑
INTEGRATED PARTITIONING	●	◐	◑	◑	◑	◑	◑	◑	◑	◑	◑
MIXED MEDIA	●	◐	◑	◑	◑	◑	◑	◑	◑	◑	◑
NATIVE iSCSI	●	◐	◑	◑	◑	◑	◑	◑	◑	◑	◑
USER UPGRADE: SLOTS AND DRIVES	●	◐	◑	◑	◑	◑	◑	◑	◑	◑	◑
ENCRYPTION	●	◐	◑	◑	◑	◑	◑	◑	◑	◑	◑

investment protection

COMPATIBILITY
COMPATIBLE WITH SPECTRA'S
RXT™ SABRE™ DISK

THE BEST SUPPORT
ASSISTED SELF MAINTENANCE, 7 X 24 TELEPHONE,
4 HOUR RESPONSE, NEXT BUSINESS DAY,
WORLD-WIDE, ON-SITE

SIMPLIFY MANAGEMENT
LOCAL AND REMOTE MANAGEMENT
WITH OBSERVATORY AND TELESCOPE

GROWTH FLEXIBILITY CONNECTIVITY RELIABILITY

CHANGING THE WORLD OF STORAGE