

QUALSTAR RLS-8500 EXPANDABLE RACKMOUNT TAPE LIBRARY SYSTEM

RELIABILITY,
PERFORMANCE
AND VALUE



The RLS-8500 Series extends Qualstar's well-respected RLS family of *Simply Reliable* automated tape libraries to users requiring high capacity, expandable rack mount storage solutions. Delivering superior performance and value, RLS-8500 Series libraries provide initial capacities up to 285 terabytes (native) in just 10U. Using typical data compression ratios, each library can exceed 712 terabytes. Individual RLS-8560 libraries contain 54 data cartridge storage slots and a dedicated four slot I/O port. The RLS-85120 model has 114 data slots. Both libraries can house up to five LTO 5 or LTO 6 tape drives.

CAPACITY EXPANSION

Installing an optional storage matrix into the RLS-8560 adds 60 slots, more than doubling its capacity.

Two, three or four RLS-8500 Series modules can be interconnected easily and economically to store up to 474 cartridges, delivering capacities exceeding 2.9 petabytes in a single 40U high, 19-inch rack. Up to 20 LTO 5 or LTO 6 SAS or fibre channel tape drives provide the data throughput to meet the most demanding system performance requirements. FastPass™, the simple, robust tape mover installs in minutes and fits entirely within the form factor of the units. Tapes are passed internally from one module to the next without impacting

ongoing read/write operations. The expanded library is completely self-calibrating. No additional power or cooling is needed.

Installing the RLS-8560 slot expansion option or aggregating multiple modules can be easily accomplished by users in just a few minutes.

ENCRYPTION ENABLED

Protect valuable data in transit. The RLS-8500 Series enables use of the powerful data encryption capability built into every tape drive. Simple, easy-to-use, library-enabled encryption allows administrators to assign a separate key to the tapes in each partition.

Q-LINK™ REMOTE MANAGER

Q-Link is the web browser-based library manager that allows any RLS Series Tape Library to be configured, monitored, diagnosed and managed from anywhere in the world. Even firmware updates can be implemented remotely.

RELIABLE, INTELLIGENT ROBOTICS

The RLS-8500 Series unique robotic mechanisms are *Simply Reliable* by design. Leadscrew based robotics using brushless DC motors and closed-loop servo control systems provide precise positioning. All FRUs, options and tape drives are auto-discovering, and all electrical and mechanical adjustments have

been completely eliminated. Each tape drive is a self-connecting assembly, simply slide the drives in or out. All service access is through the front or rear of the unit.

EASY OPERATION

The RLS-8500 Series is equipped with a high resolution, color touch screen for local operation. An intuitive menu-driven control system provides easy-to-use installation, configuration and operation information. All of the information, functions and controls built into the front panel display are replicated in Q-Link. If allowed by user security policies, Qualstar Technical Support can use Q-Link to monitor library operation to assist with configuration issues and troubleshooting.

ADVANCED CARTRIDGE MANAGEMENT AND SECURITY

Barcode scanning enhances throughput and controls the media inventory. RLS-8500 models offer one or two, 4-slot I/O ports per library for efficient control of imported and exported media.

LOGICAL LIBRARY

Logical Library partitioning is built into RLS-8500 Series libraries. It allows up to five servers to share a single library, up to 20 servers to share a fully expanded configuration, even if each server is running a separate application.



SIMPLY RELIABLE

QUALSTAR RLS-8500 EXPANDABLE RACKMOUNT TAPE LIBRARY SYSTEM

RELIABILITY, PERFORMANCE AND VALUE



ENGINEERED FOR RELIABILITY

- Auto-connecting, user-installable tape drives
- All brushless motors
- Self-calibrating all-digital servo control system
- Auto-aligning: no mechanical or electrical adjustments
- Auto-discovery of all components
- Over 2,000,000 MEBF
- Automated tape drive cleaning
- Filtered, forced-air cooling

VALUE

- Simple, easy-to-use encryption
- RLS-8560 60-slot expansion option
- RLS-8560 54-slot expansion option with second I/O port
- N+1 power option
- Dual AC input power option
- Three year warranty

VERSATILITY

- Expandable to 474 slots and 20 drives with FastPass™ tape mover option
- ADI library interface
- Rack mount kit included
- SAS and Fibre Channel drive support
- Logical Library partitioning
- All access through front and back of unit

COMPREHENSIVE USER INTERFACE

- Q-Link browser-based remote library manager
- Color LCD touch control panel and menu system for easy installation, configuration, operation and maintenance

EFFICIENT MEDIA CONTROL

- Barcode scanner
- 4-slot I/O port standard
- Second I/O port option (n/a RLS-8560)

RLS-8500 SERIES SPECIFICATIONS	RLS-8560 / 85120	EXPANDABLE TO:
Drive Type	LTO 5 and LTO 6	
Number of Drives	1 – 5	Up to 20
Number of Tapes	54 / 114 ¹	Up to 474
Native Capacity - LTO 5 (TB)	81 / 171	Up to 711
Native Capacity - LTO 6 (TB)	135 / 285	Over 1.1 PB
Hours of SD (25Mb) Video - LTO 5	Up to 13,110	Over 54,500
Hours of SD (25Mb) Video - LTO 6	Up to 21,800	Over 90,800
Max Compressed Capacity - LTO 5 (TB)*	162 / 342	Over 1.4 PB
Max Compressed Capacity - LTO 6 (TB)*	337 / 712	Over 2.9 PB
Max Native Data Rate - LTO 5 (TB/hr)	2.5	10
Max Native Data Rate - LTO 6 (TB/hr)	2.8	11.5
Max Compressed Data Rate - LTO 5 (TB/hr)*	5.0	20
Max Compressed Data Rate - LTO 6 (TB/hr)*	7.2	28.8
Library Interface	ADI	
Drive Interfaces	SAS, FC	
Field Expansion	Add 60 slots to RLS-8560 ²	Interconnect up to 4 modules
Average Exchange Time (seconds)	7.5	
FastPass Time (seconds)		< 2
Time to Scan Barcodes (seconds)	< 149	< 149
Barcode Reader	Standard	
Rack Mount Kit	Standard	
I/O Port / Slots	1 port with 4 slots Optional second port in 85120	Expansion modules may have 0, 1 or 2 ports each
Height (in/cm)	10U (17.5 / 44.5)	Up to 40U (70 / 177.8)
Width (in/cm)	16.6 / 42.2	
Depth (in/cm)	35.3 / 89.7	
Net Weight (lb/kg)	222 / 100.7	888 / 402.8
Power Consumption (watts, avg)	85	340

1. 108 slots if second I/O port installed

2. 54 slots with second I/O port option * Using typical compression ratios

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SIMPLY RELIABLE