Unleash the Power: Connecting Spectra Tape Libraries to Ethernet Networks
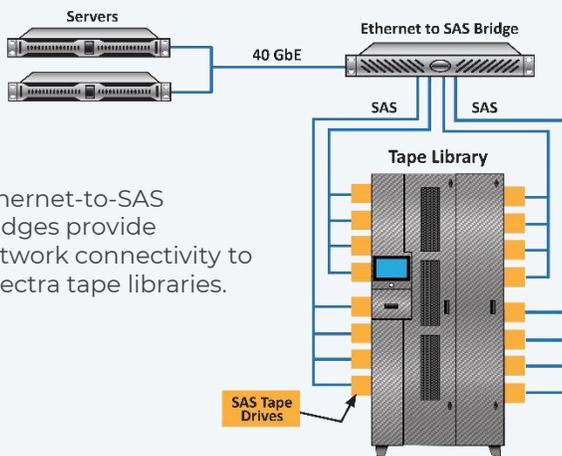

A Simple Solution for Ethernet

Spectra® tape library users can now enjoy Ethernet's many benefits, including enhanced performance, versatility, ease of use and cost-effectiveness. By incorporating Ethernet-to-SAS bridges, organizations eliminate the necessity for Fibre Channel and dedicated SAN connections, streamlining operations and reducing costs and complexities.

For data centers that still rely on Fibre Channel solely for tape support, transitioning to a unified technology opens up new possibilities. This shift allows organizations to utilize Ethernet switches and infrastructure, offering greater flexibility with fewer distance limitations.

How it Works

The Ethernet-to-SAS bridges offer a simple solution for data centers, allowing them to connect their Ethernet networks seamlessly to Spectra tape libraries.

- Connects 1 to 16 SAS drives per bridge
- Adds less than two milliseconds of latency
- Maintains a consistent level of performance by separating data traffic from services

Ethernet-to-SAS bridges provide network connectivity to Spectra tape libraries.

Benefits of Ethernet Connectivity

Ethernet versatility

- Easily supports both file and object storage
- Eliminates the need for Fibre Channel connections to tape library and drives

Reliable performance

- Optimized to keep multiple tape drives streaming at maximum throughput
- Engineered with an open design not to alter the data path

Disaster and cyber resilient

- Eliminates Fibre Channel and SAS distance limitations between the host and Ethernet-to-SAS bridge
- Create a remote copy using iSCSI in a metropolitan area to enhance data protection

Cost efficient

- Reduce networking costs by using Ethernet network interface cards, switches, and cables
- Implement lower-cost SAS rather than Fibre Channel tape drives
- Requires no dedicated or highly skilled personnel

Flexible interoperability

- Choose an iSCSI or iSER connection for less overhead and greater performance
- Supports Spectra Stack, Spectra Cube™, Spectra T950 and TFinity® tape libraries

Technical Specifications

For Ethernet-to-SAS bridges, Spectra Logic offers the ATTO XstreamCORE® ET 8200T bridge.

The ATTO XstreamCORE ET 8200T bridge empowers Spectra library users with SAS tape drives to transition from an FC or direct-attach SAS tape drive architecture. Offering two 40GbE inbound connections, it can drive up to 16 channels of 12G SAS. The SAS tape drives provide the connectivity on the tape library side. The bridge supports connections using iSCSI or iSER via RoCE V2 (iSCSI Extensions for RDMA), giving you the flexibility to choose the connectivity option that best suits your needs. Once configured and set up, the bridge operates transparently to the host, allowing it to read or write to the drives as if they were directly connected to the host system.

Spectra makes it easy to order, install, and configure the bridge as part of your tape library environment. Our team of experts, as trusted ATTO partners, is ready to assist you in sizing the right solution for your needs.

ATTO XstreamCORE ET 8200T front view

ATTO XstreamCORE ET 8200T rear view

ATTO XstreamCORE ET 8200T bridge	Description
Operating Systems Supported	• RoCE Linux • iSCSI Linux and Windows
Input Connectors	2 – 40Gb optical Ethernet
Output Connectors	4 – 12Gb mini-SAS HD connectors (x4)
Transfer Rate per Bridge	• Up to 4.8GB/s sustained for iSER • Up to 3.0Gb/S sustained for iSCSI
Architecture Latency	< 2 microseconds
SAS Tape Drives Supported	Up to 16 tape drives per bridge
Tape Drives Supported	• LTO-7, LTO-8 and LTO-9 • IBM TS1160 and TS1170 • All future SAS tape technology.
Form Factor	1U rackmount
Product Dimensions	• Height: 1.735 inches • Length: 9.90 inches • Width: 17.31 inches • Weight: 9.7 pounds (unboxed)
Operating Environment	• Temperature: 5 to 40º C at 10,000 feet • Humidity: 10 to 90% non-condensing

About Spectra Logic Corporation

www.spectralogic.com