ATTO ThunderLink® SH 3128
Thunderbolt™ 3 to 12Gb SAS/SATA

**Industry Proven Technology**

Delivering creative, engineering and technical professionals a high performance and low latency Thunderbolt™ connectivity solution engineered for applications where optimized performance and high throughput are essential. ThunderLink® adapters enable today’s Thunderbolt enabled desktop and mobile workstations to connect into high performance storage or networks. ATTO utilizes over 30 years of experience in reliable storage connectivity, history as an original Thunderbolt developer and an extensive depth in building media solutions to bring first-to-market high performance connectivity solutions to customers.

**Flexible Connectivity Solutions**

12Gb SAS/SATA adapters are an ideal Thunderbolt 3 solution for users looking to achieve efficient storage scalability. The integrated family of ThunderLink adapters boasts an extensive list of customer design wins and certifications with respected industry partners including the latest LTO-8 tape drives.

**Performance Engineered**

12Gb SAS/SATA adapters are designed to provide flexible connectivity to SAS/SATA storage, and are engineered to manage latency for real-time environments. ATTO Advanced Data Streaming (ADS™) Technology maximizes CPU processes to deliver smooth and reliable data transfers and the highest consistent performance. ATTO pays close attention to detail in board design and signal integrity to minimize transmission errors and data corruption. These differentiating capabilities make ATTO the premier choice for high-performance direct-attached SAS/SATA storage connectivity.

**Advanced Management Tools**

Easy-to-use ATTO ConfigTool™ features an intuitive GUI that simplifies the installation, management and monitoring of the Thunderbolt adapter. With advanced troubleshooting and performance tuning capabilities, ConfigTool provides users with sophisticated diagnostics and the flexibility to control settings for specific applications.

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**About ATTO**

For over 30 years, ATTO Technology, has been a global leader across the IT and media & entertainment markets, specializing in network and storage connectivity and infrastructure solutions for the most data-intensive computing environments. ATTO works with partners to deliver end-to-end solutions to better store, manage and deliver data.

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Applications
ATTO ThunderLink® SAS/SATA adapters deliver high-performance and reliable connectivity solutions for the most demanding storage environments, including digital content creation, tape streaming and backup, rich content delivery, server clustering, and complex databases. ATTO ThunderLink SAS/SATA adapters enable users to achieve the ultimate in I/O performance for real-time and transactional applications.

Key Features
- 12Gb/s SAS/SATA Support
- Auto Negotiation between 12Gb/s, 6Gb/s and 3Gb/s SAS/SATA devices
- Supports Serial SCSI Protocol (SSP), SATA Tunneling Protocol (STP, SMP, SAT and direct attached SATA protocol
- SES and S.M.A.R.T. support
- Flash ROM for easy field updates
- Wide port end device support
- Support for SAS tape devices and transport layer retries (TLR) for error handling

User Benefits
- Highest available MB/s and IOPS performance
- Superior system performance with latest SAS/SATA technology
- Low power consumption
- Locking power supply
- Kensington Security Slot

Management Tools
- ConfigTool™ (w/GUI) management and configuration utility
- Command Line Interface for advanced functionality

Operating System Support
- macOS* (including Apple silicon M1/M2 devices)
- Windows*
- VMware*

Dimensions
- 8.66"(D) x 4.07"(W) x 1.20"(H)

Power Adapter
- Input: 100-240VAC, 50-60Hz, 0.6A Max
- Output: 12VDC

External Connectivity
- (2) 12Gb x4 mini-SAS HD connectors (SFF-8644)

Environmental
- Operating Temperature: Temperature: 0-40° C
- Humidity: 10-90% non-condensing

Storage Temperature
- Temperature: -40 C to 70° C
- Humidity: 5-95% non-condensing

Compliance
- FCC Part 15 Subpart B, Class B
- EN55032, Class B/EN55024
- IEC62368-1
- cTUVus
- EU RoHS (2011/65/EU), (EU) 2015/863
- TAA Compliant (Country Of Origin: USA)

Warranty
- Three years

Ordering Information
- Phone: 716-691-1999
- ThunderLink SH 3128: TLSH-3128-D00
- ThunderLink SH 3128: TLSH-3128-DE0 (EMEA)

Complementary Products
- ATTO Celerity™ Fibre Channel HBAs
- ATTO ExpressSAS® HBAs
- ATTO FastFrame™ NICs
- ATTO XstreamCORE® Fibre Channel Bridges
- ATTO premium cables

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<tr>
<th>ATTO ThunderLink® Adapter</th>
<th>SH 3128</th>
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<tr>
<td>Model Number</td>
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<td>TLSH-3128-DE0</td>
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<td>Input Connectors</td>
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