## TECH SPEC

### ATTO ThunderLink® FC 3322

**Thunderbolt™ 3 to 32Gb Fibre Channel**

### Industry Proven Technology

ATTO has over 30 years of experience developing first-to-market high performance and reliable storage connectivity solutions for customers. ATTO ThunderLink® Fibre Channel adapters now provide creative professionals using Thunderbolt™ enabled hosts, cost effective access to storage not previously available using FireWire or USB. The integrated family of ThunderLink adapters boasts an extensive list of customer design wins and certifications with respected industry partners.

### Technical Features

- Dual 32Gb Fibre Channel ports
- (2) SFP+ LC optical multimode modules included
- Supports all Apple silicon including M1/ M2 devices
- Supports 4K video file transfer and display simultaneously with dual 40Gb/s Thunderbolt 3
- Daisy chain up to five additional Thunderbolt technology enabled devices
- Backwards compatible with 20Gb/s and 10Gb/s Thunderbolt adapters via legacy adapter
- ATTO MultiPath Director™ failover and load balancing
- Three year standard product warranty

### Flexible Connectivity Solutions

With dual channel configuration, and support for load balancing and failover, the 32Gb/s Fibre Channel adapters are an ideal solution for users looking to achieve the highest I/O and data throughput for advanced video and access to IT applications. ThunderLink 32Gb Fibre Channel adapters can support both local and storage area networks for macOS® and Windows® platforms, providing a single connectivity solution for customers.

### Performance Engineered

Fibre Channel adapters are designed to provide fast, redundant and highly available connectivity to Fibre Channel storage, and are engineered to manage latency for real-time applications. ATTO Advanced Data Streaming (ADS™) Technology provides controlled acceleration of data to deliver the highest consistent performance and reliable data transfers for video editing, digital audio, video on demand, or database applications. ATTO pays close attention to detail in board design and signal integrity to minimize transmission errors and data corruption. Specialized Fibre Channel drivers with support for multipathing make ATTO the premier choice for high-performance Fibre Channel storage area network (SAN) connectivity.

### Advanced Management Tools

The easy-to-use ATTO ConfigTool™ features an intuitive GUI that simplifies the installation, management and monitoring of the device. 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® Fibre Channel 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 FC 3322 adapters enable users to achieve the ultimate in I/O performance for real-time and transactional applications.

General Features
- Auto Negotiation to 32Gb, 16Gb and 8Gb
- Supports point-to-point and direct fabric/switch attach
- ANSI Fibre Channel: FC-FS, FCP
- Flash ROM for easy field upgrades
- FC Class 3 Support
- Buffer Credits: 80
- Supports FDMI and WMI (Windows only)
- Supports NPIV (Windows only) and Virtual Fabric

Advanced Software Features
- Adaptive load balancing

User Benefits
- Superior performance for a wide range of applications
- Low power consumption
- Increased switch port availability
- Reduced cost per MB of data transferred
- Seamless integration into existing FC SANs
- Support for virtualized server environments
- Extensive certification with SAN infrastructure components

Management Tools
- ATTO ConfigTool™ (w/GUI) management and configuration utility

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

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
- Dual (2) 32Gb SFP+ LC Optical modules
- External LEDs for on-line and speed status for each port

Environmental
Operating Temperature
- Temperature: 0-36°C at 10,000 ft, 40°C at 8,000ft
- 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
- EN55022, Class B/EN55024
- EN60825-1
- EN60825-2
- IEC62368-1
- cTUVus
- EU RoHS (2011/65/EC), (EU) 2015/863
- TAA Compliant (country of origin: USA)

Warranty
- Three years

Ordering Information
- Phone: 716-691-1999

Thunderbolt 3 to 32Gb Fibre Channel
- ThunderLink FC 3322: TLFC-3322-D00
- ThunderLink FC 3322: TLFC-3322-DE0
- Additional SKU populated with long range, single mode SFP+s available.
- Call for availability

Gen 6 technology necessitates that all optics must be a fully certified ATTO-branded SFP

Complementary Products
- ATTO Celerity™ Fibre Channel HBAs
- ATTO ExpressSAS® HBAs and RAID Adapters
- ATTO FastFrame™ NICs
- ATTO FibreBridge® Fibre Channel Bridges

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**ATTO ThunderLink FC 3322**

<table>
<thead>
<tr>
<th>Model Number</th>
<th>TLFC-3322-D00 (US)</th>
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<tbody>
<tr>
<td>Input Connectors</td>
<td>(2) 40Gb/s Thunderbolt™</td>
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<tr>
<td>Output Connectors</td>
<td>(2) 32Gb/s Fibre Channel</td>
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<tr>
<td>Connector Type</td>
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<td>Form Factor</td>
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