



ATTO Technology, Inc.



Fibre Channel-to-SCSI Bridge

FibreBridge™ 2400 R/D

The ATTO FibreBridge™ is a performance tuned, highly manageable, intelligent protocol translator which allows FC initiators to communicate with SCSI target devices

Performance Engineered

ATTO FibreBridge™ products are engineered with an advanced architecture which provides high-performance by leveraging the latest hardware technology combined with ATTO's intelligent bridging architecture. ATTO FibreBridge products provide industry leading performance with value added features that have addressed customer connectivity needs for over 18 years.

More than a Bridge

The FibreBridge enables users to manage storage infrastructures with features not found in direct connect technologies. Advanced read ahead and write cache algorithms in the FibreBridge give users the highest level of performance. Robust error processing enables the FibreBridge to manage disk and communication errors between targets and initiators. Email notification of errors and persistent error and trace logs assist troubleshooting in the field to minimize downtime. Virtual Drive Response makes failed or incomplete tape backups a thing of the past.

Easy-to-use Management Tools

ExpressNAV™ System Manager is a remote management user interface for configuration, monitoring and management of ATTO Bridge products. Advanced tuning features include; performance monitoring, diagnostic and troubleshooting capabilities, and phone home email notification. Several management interfaces are available including GUI, CLI, telnet, SNMP and FTP. Streamline storage management with the tools you need to confidently and efficiently manage your storage infrastructure.

Industry Leading Support

With ongoing dedicated support ATTO provides peace of mind that integrated customer solutions will make it to market on time. During the product lifecycle, vendor response can be critical to the success of a solution. ATTO has dedicated program management with an escalation process and a guaranteed response time. ATTO also provides regular firmware updates and maintenance programs to keep up with advances in technology.

Technical Features

- Connects (2) 4Gb Fibre Channel SFP ports to (2) Ultra320 SCSI ports
- Auto negotiates to 1, 2 & 4Gb FC
- Compatible with all prior SCSI Protocols
- Manual and auto SCSI device mapping
- Supports several SCSI devices including hard drives, tape drives and CD libraries
- intelligent Bridging Architecture provides optimized performance
- SpeedWrite™ feature enhances write performance by efficiently managing outstanding commands
- Advanced management, remote administration and system diagnostics via the ExpressNAV™ System Manager
- Management capable through RS-232, Ethernet or in-band via Fibre Channel
- Virtual Drive Response™ (VDR) reduces failed backups due to busy or slow-to-respond storage devices
- Available in standard 1U 19" rackmount or desktop form factor
- Operating System Independent
- 2-year standard product warranty



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Technical Specifications

Technology

FibreBridge™ products are based on the ATTO intelligent Bridging Architecture which combines powerful hardware with an efficient software data engine to deliver high performance with valuable features and minimal overhead. ATTO Bridges set the standard for customers that need to deliver a total system approach to storage connectivity.

Bridging Features

- The core control logic driving ATTO Bridge products is optimized to maintain priority for data transfers while providing memory management and cooperative multi-tasking
- The Universal Virtual Device Architecture (UVDA) is a common code base that supports protocol conversion between hosts and targets. UVDA products are designed to move data quickly and efficiently
- Virtual Device Manager (VDM) is a proprietary software architecture that assures the smooth flow of data. VDM minimizes overhead by creating a virtual link between initiators and targets on a per-command basis
- The Data Routing Fabric topology incorporates advanced ASIC, firmware and interface technologies that enable users to configure bridges to specific operating environments
- Virtual Drive Response™ (VDR) improves reliability by reducing failed or incomplete backups
- Error Checking Cache (ECC) Memory
- Automatic and Manual LUN Mapping

Management Tools

- User friendly ExpressNAV™ System Manager is an integrated tool which provides remote configuration, management and diagnostic capabilities
- Local diagnostics supported via Command Line Interface (CLI), Telnet and FTP
- SCSI Enclosure Services (SES) monitor critical components to provide system feedback
- Persistent Event Log to assist troubleshooting
- Field upgradeable firmware
- Performance monitoring and error logging
- Temperature monitoring
- Phone home email notification of errors

Connectivity and Notification

- All connectors on rear side of bridge
- External LEDs for power, ready and fault status, SCSI activity, Fibre Channel activity, link and speed, Ethernet activity and link

Fibre Channel Connections:

- (2) 4Gb SFP Fibre Channel connectors
- Optical SFP modules included
- Auto negotiates to 4Gb/2Gb/1Gb devices
- Full support for FC-AL, FC-AL2, FC-FLA, FC-FS, FCP-3, PLDA
- Private loop, public loop, point-to-point or fabric point-to-point with support for direct connection to F-port switches
- Automatic and Manual LUN Mapping

SCSI Connections:

- (2) independent Ultra320 SCSI busses
- Dual stacked VHDCI SCSI connectors
- Backward compatible with single-ended devices and previous SCSI protocols

Management Interfaces

- 10/100 RJ-45 Ethernet port
- RS-232 serial header console port

Product Dimensions

- Height 1.579" - Length 10.00" - Width 16.494"
- Rackmount units have mounting hardware that will extend the width to fit a 19" rack.

OEM Customization

- Software configuration can define value-add features to the basic bridging hardware
- OEM configuration files store OEM specific parameters in NVRAM which enable features, product naming and look and feel of the user interface for the OEM product
- Product labeling program to allow OEM logo and naming to appear on the front of the rackmount or desktop enclosure

Operating Environment

Hardware Temperature:

- Temperature: 0-40° C
- Humidity: 20 - 80% non-condensing

Power and Airflow

- Input 100-240 VAC, 1A, 50-60 Hz
- 11 CFM (Ambient air not to exceed 40° C)

Agency Approvals and Compliance

- FCC Class A
- CE (EN55022/EC50024)
- CSA
- RoHS Compliant 2002/95/EC



ATTO FibreBridge™ 2400	
Input Connectors	(2) 4Gb Fibre Channel (SFP)
Output Connectors	(2) Ultra320 SCSI (VHDCI)
SCSI Interface	LVD/SE
Transfer Rate	Up to 480MB/s
Active Initiators Supported	64
Memory Type	ECC
Form Factor	1U desktop/rackmount
Model Number / SKU	FCBR-2400-DR0 (rackmount)