



# SANbox 3810 FC SAN Switch

## Affordable Solution for Small SANs

### Why Install a SAN?

- Share storage resources among servers
- Reduce hardware and management costs
- Improve application performance and availability
- Accelerate server backups and disaster recovery
- Increase overall storage capacity

### SANbox 3810 Features

- 8 ports
- 8-Gbps speed (100% non-blocking)
- Backwards-compatible with 4Gb and 2Gb devices
- 1U rack-mountable unit

### Easy to Deploy and Use

- Configuration wizards for fast setup
- QuickTools™ on-board GUI
- Command Line Interface (CLI)
- I/O StreamGuard™ – guaranteed stability for tape, video and other streaming applications
- NPIV support for virtualized environments
- Advanced Fabric Security included
- Drag-and-drop zoning

### Hassle-Free Interoperability

- Deploy with 8Gb, 4Gb or 2Gb optics
- Compatible with all leading adapters and storage



### Connect your first SAN with today's most advanced technology.

SANbox 3810 offers the simplest and most affordable way to share the capacity of Fibre Channel storage devices among multiple servers. Maximize the value of your RAID and tape library investments with simultaneous direct server connections via a state-of-the-art Storage Area Network.

Link up to eight devices in a single-switch configuration with quick installation wizards and an easy-to-use on-board management GUI. Perfect for high-speed server backup or departmental "SAN islands," SANbox 3810 helps busy IT managers centralize storage control and reduce overall infrastructure costs while improving their users' access to data.

Cost-conscious companies no longer need to sacrifice strategic IT goals to meet budgetary goals. With the 3810, included features such as I/O StreamGuard and NPIV support provide all the enterprise-class performance that QLogic's larger customers have come to depend on – *at a price that will pay off immediately for even the smallest businesses.*

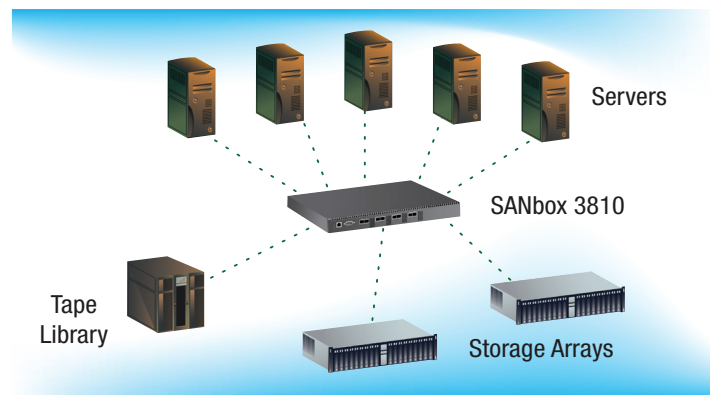


Fig. 1 Experience the cost-saving benefits of shared storage: Maximize return on RAID/tape investments; scale storage independently of servers; manage access centrally.

Best of all, leading 8Gb Fibre Channel technology ensures this reliable entry-level switch will continue to meet the most demanding requirements far into the future, while maintaining full backward compatibility with 4Gb and 2Gb devices. Increase the long-term impact of your mission-critical storage infrastructure with today's best SAN switch value.

## SANbox 3810 FC SAN Switch Affordable Solution for Small SANs

## Fabric Specifications

## Ports per Chassis

- (8) 8Gb SFP ports

## Port Types

- All ports are universal, auto-discovering, self-configuring, and assume the following states: F\_Port, FL\_Port, G\_Port, GL\_Port. (E\_Port capability not included – product is intended for single-switch environments only)

## Performance Features

## Fabric Port Speeds

- 2/4/8-Gbps full-duplex
- All ports auto-negotiate with slower devices
- Fabric latency less than 0.2us
- Cut-through routing

## Fabric point-to-point bandwidth (8-port switch)

- 680 MBps, full-duplex

## Aggregate Bandwidth (8-port Switch)

- 136 Gbps per chassis, end-to-end
- Non-blocking architecture

## Maximum Frame Sizes

- 2148 bytes (2112 byte payload)

## Per-Port Buffering

- ASIC-embedded memory (non-shared)

## Media

## Supported SFP Types

- Hot-pluggable, industry-standard 3.3 volt SFP+ (8Gb) transceivers
- Also compatible with 4Gb and 2Gb SFPs
- Shortwave/longwave (optical), active copper

## Media Transmission Ranges (@ 2-Gbps)

- Shortwave optical: 500m (1,640 ft.)
- Longwave optical: 10km (6.2 mi.)

## Cable Types

- 50/62.5 micron multimode fiber optic
- 9 micron single-mode fiber optic

## Interoperability

- Management interoperability with leading SAN management applications

## Fabric Management

## Management methods

- QuickTools web applet (embedded on switch)
- Command Line Interface
- API, GS-4 Management Server (including FDMI), SNMP, RADIUS, FTP, TFTP, SMI-S

## Security

- User Security
  - User Accounts
  - RADIUS Authentication
- Connection Security
  - SSH (CLI)
  - SSL (Enterprise Fabric Suite and SMI-S)
- Device Security
  - FC-SP DH-CHAP
  - FC-GS-4 CT Authentication

## Access methods

- 10/100 Ethernet Base-T (RJ45), serial port (RS-232 with DB9), IPv6 support

## Diagnostics

- Power-on self test (POST)

## Fabric Services

- N\_Port ID Virtualization (NPIV) support
- Simple name server
- Hardware based zoning
- Registered State Change Notification (RSCN)
- I/O StreamGuard™
- Automatic path selection
- FDMI support

## User Interface

- LEDs, Command-line console, Web utilities

## Mechanical / Power / Cooling

- Optional rail mount kit
- Front-to-back air pattern
- RoHS-compliant

## Dimensions

- H x W x D = 43.2 x 432 x 476 mm (1.7 x 17 x 18.75 in)

## Weight

- Weight = 6.35 kg (14 lbs)

## Environmental and Equipment Specifications

## Operating

- Temperature: 0° to 40°C
- Humidity (rH): 15% & 80% 24-hour soak, non-conditional, 5% to 90% 8-hour ramp
- Altitude: 0 to 10,000 feet
- Vibration: 5-500 Hz, random, 0.21 g rms, 10 minutes
- Shock: 4g, 11ms, 20 repetitions

## Non-Operating

- Temperature: -40° to 70°C
- Humidity: 5% to 90% non-condensing
- Altitude: 0 to 50,000 feet
- Vibration: 5 to 500 Hz, random, 2.09 g rms, 10 minutes
- Shock: 30g, 13 msec, trapezoidal

## Electrical

- Voltage: 100 to 240 VAC; 50 to 60Hz
- Power load: 1A at 120 VAC; 0.5A at 240 VAC
- Power Consumption 60W nominal, 70 watts typical maximum

## Agency Approvals–Product Safety

- US/Canada: UL/cUL, 60950-1
- Europe: EN60950, CB Scheme-IEC 60950-1, CE, TUV, Low Voltage Directive
- Russia: GOST R
- Demko

## Agency Approvals–EMI/EMC

- Meets Class A emissions and immunity requirements for USA, Canada, Europe, Australia, New Zealand, Korea, Japan



The Ultimate in Performance

For information about supported SAN standards and classes of service, visit [www.qlogic.com/sanstandards](http://www.qlogic.com/sanstandards).

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