STORAGETEK ®

MCDATA SPHEREON

4500

FABRIC SWITCH

Key benefits

Save money
This entry-level fabric connectivity solution allows cost-effective migration from direct-attached storage to state-of-the-art SAN. Easier to afford, faster return on investment.

Upgrade as needed
Forward and backward compatibility across the entire McDATA switch portfolio means easy upgrades and a protected investment. And you're free to integrate one-gigabit-per-second infrastructure with two-gigabit-per-second networks at any time.

Keep data available
Fully redundant, hot-pluggable power and cooling combined with automatic health monitoring and advanced error detection accounts for high fabric availability and continuous access to end devices.

Extend capacity
Start with as few as eight ports and grow to 24 ports in a single enclosure. Use public loop connectivity to connect legacy devices to your new SAN.

Jumpstart productivity
Extensive education and training options help you get up to speed quickly and stay there.

McDATA Sphereon 4500 fabric switch

Chances are you've seen massive changes in your IT infrastructure over the years — changes in technology, in data demands, in your overall IT strategy. Imagine what the next few years will bring. You'll be ready for whatever comes with the McDATA Sphereon 4500 fabric switch from StorageTek®. These 24-port switches provide an affordable entry point for small to medium sized companies, combining two-gigabit-per-second performance with a connectivity-on-demand architecture. You get affordable connectivity today, freedom to grow as needed and an unprecedented level of flexibility and responsiveness to meet changing business conditions.

Ready, willing and scalable
The Sphereon 4500 fabric switch allows you to add capacity on the fly with McDATA's exclusive Flexport technology in 8-, 16- and 24-port configurations. Simply pay for the ports you need today, then order and install an expansion kit down the road to gain access to reserve capacity as needed. Expansion happens within your current SAN infrastructure, so you can "pay as you grow" and minimize up-front capital expense. You get the advanced features and functions of McDATA switches without paying for ports you don't need today.

Ready to evolve
Like all McDATA switches, the Sphereon 4500 fabric switch is built on the Extendable Open Network (EON), so they're forward and backward compatible with all other McDATA switches across every class of fabric connectivity. Your investment in systems, solutions, training and data is protected. And with built-in scalability and loop and Fibre Channel support, Sphereon 4500 switch is a powerful building block for any rapidly evolving enterprise that needs to run without disruption.

Affordable performance
Despite the entry-level price, Sphereon 4500 fabric switches include many high-end features. Redundant hot-pluggable power and cooling components deliver uninterrupted operation and help reduce downtime. Auto-health monitoring and online diagnostics help eliminate failures before they turn into costly problems. Advanced error detection and powerful fault isolation help accelerate maintenance and repairs if problems do occur. And McDATA's exclusive Hot Code Activation Technology (HotCAT) allows non-disruptive microcode loading and activation, so new firmware can be brought online with zero interruption to data availability.

Outstanding ROI

Auto-sensing 1- and 2-gigabit-per-second ports plus forward/backward compatibility across the McDATA portfolio means you can grow into — and not outgrow — the Sphereon 4500 fabric switch. Built on a new hardware architecture that offers a higher degree of component integration, these switches include new functionality such as GL ports, so you can support public loops based on the standard FL protocol.

Smooth, simple management

The Sphereon 4500 fabric switch simplifies SAN management with the included SANpilot management tool for small fabrics. It's a complete solution that streamlines SAN migration for small and medium businesses. Now it's easy to build a SAN infrastructure and manage it efficiently for a greater return on investment.

Optional SANavigator software and the EFC Manager tool allow you to expand your management and monitoring capabilities, providing more advanced functionality for SAN management. Use these products to configure and manage a high availability system in a core-edge topology.

Adapt and thrive

McDATA switches give you an adaptable SAN. And StorageTek provides storage systems, software, solutions, professional services and training to meet literally any storage requirement, today or tomorrow. It's a potent combination and an extreme competitive advantage that can help your enterprise thrive, even in tough times. To learn how, visit StorageTek at www.storagetek.com.

McDATA Sphereon 4500 fabric switch specifications

Performance

Port speed	1.0625–2.125 Gb/sec, full duplex
Buffer credits	Port 0–3 = 12 per port; Port 4–23 = 5 per port
Aggregate throughput	96 Gb/sec
Latency	<1 microseconds average
Distance support	12.5 miles (20 km) @ 1 Gb/sec, 6.2 miles (10 km) @ 2 Gb/sec, Ports 0–4

Capacity

Ports per chassis	24 GL ports

Availability

High-availability features	HotCAT online, non-disruptive firmware upgrades; hot-plug, redundant power and cooling; hot-plug small form factor (SFP) transceivers; online diagnostics; fault isolation tools for network-wide activity lower case all but SFP
Serviceability	Hot-plug power and cooling modules; hot-plug optics; HotCAT firmware upgrade, call home, email (with McDATA software); maintenance port; thermal event logging; unit, port, and FRU beaconing; system error LED; FRU failed LED

Compatibility

Fibre Channel protocols	FC-PH Rev 4.3, FC-PH-2, FC-PH-3, FC-GS-2, FC-FLA, FC-FG, FC-SW-2
SNMP	Fibre Alliance MIB; Fibre channel fabric element MIB; TCP-IP MIB II
TCP-IP MIB groups	System, interface, address translation, IP, ICMP, TCP, UDP, SNMP
Fibre Channel classes of service	Class 2, 3, F
Media types	Hot plug, industry standard LC small form factor (SFP)
Supported optical media types/distances	Short-wave 1,640 ft (500 m); Long-wave 6.2 miles (10 km); long-wave supported by maximum of 4 ports
Access	In-band Ethernet (10/100 Mbps)

Management

Management options	SANpilot; McDATA software; SNMP; Open Systems Management Server (OSMS); command line interface (CLI)
Fabric services	Simple name server; in order delivery (Class 2,3); management server (optional); broadcast, name server zoning
Diagnostics	Power on self test (POST); online port, internal & external loopback; online system health

Mechanical

Height	1.75 in (4.45 cm)
Depth	17.5 in (44.45 cm)
Width	17 in (43.18 cm), 19 in (48.26 cm) rack mountable
Unit height	1u*
Weight	20 lb (9.05 kg)
Cabling	9/125 micron single-mode, 6.2 miles (10 km); 50/125 micron multimode, 1,640 ft (500 m); 62.5/125 micron multimode, 1,148 ft (300 m)
Installation options	Rack mountable, 19 in EIA rack stackable tabletop

Environmental

Temperature	
Operating	+40° to +104° F (+4° to +40° C)
Non-operating	+40° to +125° F (+4° to +52° C)
Relative humidity	8%–80%
Altitude	
Operating	10,000 ft (3,048m)
Non-operating	40,000 ft (12,192 m)

Power

Operating voltage	100–240 VAC
Amps	1.25–0.67 Amps typical, 2 Amps maximum
Watts	Less than 50 Watts

Regulatory Compliance

Certification	UL, TUV, CE Mark, VCI Class A, FCC part 15 Class A

*Rack space is measured in height and expressed as a u. One u is 1.75 in (4.45 cm) in height.

ABOUT STORAGETEK®

Storage Technology Corporation (NYSE: STK), a $2 billion worldwide company with headquarters in Louisville, CO, has been delivering a broad range of storage management solutions designed for IT professionals for over 30 years. StorageTek offers solutions that are easy to manage, integrate well with existing infrastructures and allow universal access to data across servers, media types and storage networks. StorageTek's practical and safe storage solutions for tape automation, disk storage systems and storage integration, coupled with a global services network, provide IT professionals with confidence and know-how to manage their entire storage management ecosystem today and in the future.

StorageTek products are available through a worldwide network. For more information, visit www.storagetek.com, or call 1.800.275.4785 or 01.303.673.2800.

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