Sphereon™ 4400 and 4700 Fabric Channel Switches

The Sphereon Difference:

Lower cost of ownership
- Initial investment minimized
- Competitively priced port upgrades
- Investment protection

Robust flexibility
- Flexport™ technology
- Fabric services and ISL capability on every port
- Auto-negotiate 4G, 2G, and 1G

Simplified operation
- Installation and configuration wizards
- Browser-based management tool
- EFCM Basic software

High performance and availability
- Full-featured 4 Gb/s Fibre Channel non-blocking ports
- Redundant power
- Dynamic buffer credit configuration
- HotCAT™ (Hot Code Activation Technology)
- Supports EFCM for homogeneous fabrics and SANavigator® for heterogeneous fabrics

Peformance and Flexibility At Your Fingertips

The renowned design superiority of McDATA's Sphereon™ switches continues with the Sphereon 4400 and the Sphereon 4700. These 4 Gb/s Fibre Channel switches start at 8 ports and grow to 32 ports with only two switches — offering the highest performance and port density in a 4 Gb/s device. Sphereon Flexport functionality offers you the ability to add ports seamlessly and auto-negotiate 4 G, 2 G and 1 G speed ports for the ultimate in hands-off ease of use and investment protection. And Sphereon accommodates the need for SAN design changes by offering ISL capability on any port. Sphereon is the only fabric switch in the industry that demonstrates such comprehensive flexibility.

Simple, Cost-Effective Operation

Easy-to-use installation wizards and configuration software make this part of your SAN infrastructure transparent to your day-to-day operations. Sphereon switches are built to perform with high availability under the most demanding of environments. And, as always, McDATA incorporated its industry first HotCAT™ code load and activation technology as well as non-blocking and ISL capability across all ports.

McDATA Sphereon Fibre Channel switches offer a competitive price per port. Plus, the Sphereon family is designed to provide industry-leading power, cooling and space economies that, together, result in lower total cost of ownership. With their superior performance, flexibility, simplicity of operation and cost-saving abilities, the Sphereon 4400 and Sphereon 4700 are ideal for your data-intensive enterprise.

Availability

Core

- HotCAT™ online, non-disruptive firmware load and activation
- Hot-plug small form factor (SFP) optics
- Online diagnostics
- Fault isolation tools for network-wide activity

Sphereon 4400

- FlexPort non-disruptive scalability in 4-port increments
- Hot-plug, redundant external power supplies (optional)

Sphereon 4700

- FlexPort non-disruptive scalability in 8-port increments
- Hot-plug, redundant power supplies with integrated cooling

Compatibility

Core

- Fibre Channel
- Protocols: FC-AL-2, FC-DA, FC-GS-4, FC-FS, FC-MI, FC-PH-3, FC-SB-2, FC-SB-3, FC-SWAPI, FC-PI, FC-SW-3
- SNMP: FC-MIB TCP/IP MIB II
- Fibre Channel Classes of Service: Class 2, 3, and F

Performance

Core

- Port Speed: 1.0625, 2.125 and 4.25 Gb/s, full duplex
- Aggregate Throughput: 256 Gb/s for 4700; 128 Gb/s for 4400
- Latency: Less than 1 microsecond average

Scalability

Core

- Media Type: Hot-plug, industry standard LC small form factor pluggable (SFP)
- Distance: Up to 50km at 4 Gb/s, 200km at 1 Gb/s

Sphereon 4400

- Ports per chassis: 16 GL ports

Sphereon 4700

- Ports per Chassis: 32 GL ports

Management Options

Core

- EFCM Basic – Browser based tool comes standard with all Sphereon switches
- EFCM for homogeneous management (optional)
- SANavigator® for heterogeneous management (optional)

SNMP

- Command Line Interface (CLI)
- Open Systems Management Server (OSMS)

Management Access

In-band

- (10/100 Mb/s) Ethernet (RJ-45)

Fabric Services

Core

- Simple name server
- In order delivery (Class 2,3)
- Management server (optional)
- Broadcast
- Name server zoning

Diagnostics

Core

- Power on self-test (POST)
- Online port, internal and external loop-back
- Online system health
- Predictive optics monitoring

Serviceability

Core

- Hot-plug optics
- HotCAT™ firmware load and activation
- Call home, email (with McDATA software)
- Maintenance port
- Thermal event logging
- Unit, port and FRU beaconing
- System error LED
- FRU failed LED

Sphereon 4400

- Hot-plug power supply (if optional second power supply is attached)

Sphereon 4700

- Hot-plug power supplies with fans

Physical Dimensions

Sphereon 4400

- Height: 1.6” (fits 1U)
- Width: 7.8” (two fit side-by-side in 19” rack)
- Depth: 12.3”
- Weight: 8.8 pounds

Sphereon 4700

- Height: 1.6” (fits 1U)
- Width: 17.2” (19” rack mountable)
- Depth: 15.5”
- Weight: 15.0 pounds

Installation Options

Core

- Rack mountable in 19” EIA compatible rack
  4400 on optional McDATA shelf;
  4700 on optional rack kit
- Stackable tabletop

Sphereon 4400

- Pedestal mount (optional)

Environmental

Non-operating:

- Temp: -40°F to 125°F
- Humidity: 8% to 80%
- Altitude: 40,000 ft

Operating:

- Temp: 40°F to 104°F
- Humidity: 8% to 80%
- Altitude: 10,000 ft

Electrical

Core

- Operating Voltage: 90 – 264 VAC

Sphereon 4400

- Watts: 34 watts
- AMPs: 0.17 amps @ 208 VAC
- Output: 116 BTUs/hr

Sphereon 4700

- Watts: 70 watts
- AMPs: 0.315 amps @ 208 VAC
- Output: 239 BTUs/hr

Regulatory

Core

- CB, CE, ULCUL, UL AR+S, UL DEMKO, GS, GOST, NOM, AUS/NZ, FCCA, MIC, VCCI, CCC, BSMI

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