McDATA® | Networking the World's Business Data®

Sphereon™ 4400 and 4700 Fabric Switches

The Sphereon Difference:

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

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

Simple installation and 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)
- EFCM support for large fabric management
- FICON/CUP support

McDATA's next-generation Sphereon Fabric Switches offer "no-compromise" value: they feature enterprise-class functionality, 4 Gb/s performance and low total cost of ownership. Sphereon switches are the most flexible fabric switches in the industry, meeting the needs of companies of all sizes with a wide range of SAN environments.

Sphereon 4400: Highest Performance, Smallest Package

The 16-port Sphereon 4400 is the smallest full-featured 4 Gb/s switch on the market today. At less than half a rack width, the Sphereon 4400 delivers unmatched flexibility of deployment. Companies can either securely mount a single unit in 1U or mount two units side by side for the highest 1U port density or to achieve fabric redundancy.

Sphereon 4700: Larger Port Count at a Mid-Tier Price

The Sphereon 4700 is ideal for companies that require a higher port count and enterprise-class functionality at a mid-tier price. Starting at 16 non-blocking ports and growing to 32 in 8-port increments, the Sphereon 4700 supports the growth needs of your mid-sized company or enterprise department. It is also FICON/CUP qualified for seamless integration into mainframe environments.

McDATA Hallmark Features and Functionality

The Sphereon 4400 and 4700 share McDATA's enterprise-class features that make them ideal for companies of all sizes. They offer easy-to-use installation wizards and configuration software as well as complimentary EFCM Basic SAN management software.

The Sphereon 4400 and Sphereon 4700 auto-negotiate 4, 2 and 1 Gb/s speeds for ease of use and investment protection. They assure ultra-high availability with McDATA's exclusive HotCAT™ code load/activation technology and non-blocking ports. The Sphereon family is designed to provide industry-leading power, cooling and space economies that, together, result in lower total cost of ownership.

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
Sphereon 4700
FICON/CUP support

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 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

ENVIRONMENTAL
Non-operating:
Temp: -40ºF to 140ºF

Humidity: 8% to 80%

Altitude: 40,000 ft
Operating:
Temp: 40ºF to 104ºF

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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