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 8 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

Sphereon 4400

- Pedestal mount (optional)

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

McDATA Corporate
380 Interlocken Crescent
Broomfield, CO 80021
USA
800.545.5773
720.558.8000

McDATA Europe
Technologiezentrum
Postfach 10 31
D-85501 Ottobrunn
Germany
(49) 89.607.39776

McDATA Asia Pacific
20 Cross Street, #02-11/12
China Court, China Square Central
Singapore 048422
+65-6438 0600

MᴄDATA®

Courtesy of
www.mcdata.com

MC-625.006