

# BROCADE Mi10K DIRECTOR



## STORAGE AREA NETWORK

## Taking Enterprise Storage Networking to the Limit

### HIGHLIGHTS

- The right performance for any need, with 1/2/4/10 Gbit/sec transfer rates
- Simplifies networks with deterministic performance and 256 ports
- Enables safe and effective consolidation efforts with SAN LPARs™ and OPEN VSAN technology
- Advanced security and diagnostic tools to reduce risk and increase uptime
- Supports FICON® and Fibre Channel protocols
- Interoperable with equipment from other vendors
- Supports business continuity with link distances greater than 190km at 10 Gbit/sec

Today's enterprise SANs are growing exponentially. To reduce costs and make the best use of storage equipment, companies must consolidate and simplify vast and diverse storage networking environments. The Brocade® Mi10K Director meets this task, providing the most capable, flexible and robust switching solution available for enterprise environments. With the Brocade Mi10K, companies can now securely and efficiently consolidate very large, diverse and geographically distributed networks. The Brocade Mi10K offers up to 256 1/2/4 and 10 Gbit/sec I/O ports in a compact, 14 RU height chassis. The Brocade Mi10K is the highest performance SAN switching device available today.

### WHAT'S NEW IN THE BROCADE Mi10K

Enterprises around the world are already relying on the unequalled features and functionality of the Brocade Mi10K. With the Brocade Mi10K, we have raised the bar for consolidation with new features and functionality that may be applied to all Brocade i10Ks back to SN1. The industry's best investment protection story has just gotten better.

**Improved Performance:** With the addition of 4 Gbit/sec performance, the Brocade Mi10K now offers 1/2/4/10 Gbit/sec throughput to meet varying application needs. Open Trunking allows companies to

further increase performance by balancing performance across under-utilized links.

**Security:** The Brocade Mi10K adds new features like Authentication and Radius Support, to lock down networks from accidental or malicious intrusions.

**Manageability:** Heterogeneous administration with Brocade EFCM release 9.0 reduces management costs by using a single, intuitive tool for all your network needs.

**Availability:** New advanced diagnostics catch problems before they occur.



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## MAXIMIZING SAN INVESTMENTS

Brocade and its partners offer complete SAN solutions to meet a wide range of technology and business requirements. These solutions include education and training, support, service, and professional services to help optimize SAN investments. For more information, contact an authorized Brocade sales partner or visit [www.brocade.com](http://www.brocade.com).

## BROCADE MI10K DIRECTOR SPECIFICATIONS

Availability	
Designed to provide 99.999% uptime capabilities to meet the highest availability standards	
Hot-plug, redundant power supplies, fans, processors, switch cards	
Hot-plug optics, port modules	
Online diagnostics	
HotCAT™ technology for online, non-disruptive firmware load and activation	
*Port fencing	
*Predictive optics monitoring	
*Safe zoning mode	
Supported Connectivity	
Fibre Channel, FICON w/CUP	
Compatibility	
Fibre Channel Protocols	FC-PH, FC-PH-2, FC-PH-3, FC-GS-2, FC-GS-3, FC-FLA, FC-FG, FC-MI, FC-SW, FC-SW-2, 10GFC, FC-FS, FC-PI, FC-SB-2, FC-SB-3
Fibre Channel Element MIB	FE-MIB
TCP/IP MIB-II Groups	System, Interface, Address Translation, IP, ICMP, TCP, UDP, SNMP
Classes of Service	Class 2, Class 3, Class F
Performance	
Port Speed	1, 2, 4 and 10 Gbit/sec at full duplex
*Open Trunking heterogeneous load balancing	
RSCN filtering	
Scalability	
Ports per Chassis	256 ports
*239 Fibre Channel domain addressing	
Supported Optical Media	
Media Type	Hot-plug, industry standard LC Small Form Factor
2 Gbit/sec and 4 Gbit/sec	
Shortwave	*150m (492 ft) at 4 Gbit/sec 300m (984 ft) at 2 Gbit/sec
Longwave	*4km (2.4 mi) at 4 Gbit/sec *10 km (6.2 mi) at 2,4 Gbit/sec 35km (21.7 mi) at 2 Gbit/sec 80km (49.7 mi) at 2 Gbit/sec
Dist. w/Repeaters	Up to 100km (62 mi) at 4 Gbit/sec 10 Gbit/sec

Shortwave	82m (269 ft) with OM2 cable 300m (1,148 ft) with OM3 cable
Longwave	10km (6.2 mi) 35km (21.7 mi)
Dist. w/Repeaters	Up to 190km (117 mi)

### Management Options

\*Heterogeneous Enterprise Fabric Connectivity Manager (EFCM)

SNMP v1/2/3

CLI - Telnet, SSH, SSHv2

FICON Management Server (CUP)

Inband Management (OSMS)

RSCN Filtering

### Virtual Director

SAN LPARs

\*OPEN VSANs

### Security

SAN LPAR hard partitioning

\*Password Authentication

\*Radius Support

\*Security Log

\*Log-in banner

\*E/F port authentication

\*CHAP authentication

\*SSHv2

\*IP ACLs

SSH

SSL

SNMP v3

Port, switch and fabric binding

### Fabric Services

Simple Name Server

Management Server

Fabric Config Server

Unzoned Name Server

Fabric Zone Server

FICON CUP Server

Fabric Login Server

Fabric Controller

Domain Controller

### Diagnostics

Power-on self test

Internal and external loopback

Online system health

\*Fibre Channel ping

\*Hot device detection

\*Predictive optics

\*Traceroute

\*Global Name Services display

\*Route table display

## **BROCADE Mi10K DIRECTOR SPECIFICATIONS (CONTINUED)**

### **Serviceability**

HotCAT™ (hot code activation technology)

Call-home, e-mail (with McDATA software)

FRU beaconing

### **Installation Options**

Rack mountable, Brocade cabinet rack

### **Environmental**

Non-operating temp 0° C to 60° C (32° F to 140° F)

Non-operating humidity 5%–80%

Max. non-operating altitude 12,192 m (40,000 ft.)

Operating temp 0° C to 40° C (32° F to 104° F)

Operating humidity 8%–80%

Max. operating altitude 3,048 m (10,000 ft.)

### **Physical Dimensions**

Height 67.2 cm (24.5 in. 14U)

Width 44.3 cm (17.5 in.)

Depth 86.4 cm (34 in.)

Weight 152.0 kg (335 lbs.)

### **Electrical**

Operating voltage 200–240 VAC

AMPs (max.) 12 AMPs @ 208 VAC

Heat output (max.) 8,533 BTU/hour

Watts (max.) 2500 Watts

### **Regulatory and Emissions**

Meets safety and emission requirements CB, CE, ULcUL, UL AR+S, GS, GOST, NOM, AUS NZ, FCCA statement, Canadian statement, MIC mark, FCCI Demko

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