

IBM TotalStorage SANC40M Cabinet



Space saving design with up to 512 Fibre Channel ports in single footprint

Highlights

- **Space-saving cabinet for IBM TotalStorage® SAN m-type (McDATA®) directors and switches**
- **Dual power distribution system designed for high availability**
- **Space for 1U rack mount management server and 39U for directors and switches**
- **Future-ready design**
- **Flexible configuration options**

Efficient data center design

Rapidly growing Fibre Channel SAN infrastructures place a premium on data center floor space and overhead cable raceway capacity. The IBM TotalStorage SANC40 cabinet provides vertical space for a 1U rack mount management server and 39U for IBM TotalStorage m-type (McDATA) directors and switches, while occupying only seven square feet (0.7 square meter) of valuable floor space. The cabinet supports internal cable management for up to 512 fiber cables and includes a 24-port Ethernet.

High-availability power distribution center

Its design provides required airflow and power for high-availability operation. The cabinet comes complete with 28 individual power connections or 14 power connections with dual independent power distribution and dual line cords.

The cabinet supports up to two IBM TotalStorage SAN256M directors; three IBM TotalStorage SAN140M directors; or a combination of up to 14 high-availability, dual power-connected IBM TotalStorage SAN m-type switches and directors.

Future ready-design

The cabinet is designed with current and future generations of switches and directors in mind. IBM TotalStorage SAN m-type switches utilize space-efficient LC connectors and Small Form-factor Pluggable, SFP optical transceivers which provide some of the most efficient packaging available today. The cabinet is designed to support up to 512 fiber optical cables and 24 Ethernet cables. This advanced design provides room for future expansion as more new switch products come to market.

Flexible configuration options

McDATA Enterprise Fabric Connectivity Manager (EFCM) software is designed to provide an enterprise-to-edge view of the entire SAN, allowing IT administrators to monitor and control all switched enterprise components from a single console.

A 1U rack mount management server with McDATA EFCM software helps centralize management of multiple directors in the fabric and monitors their operations. The server provides two Ethernet LAN connections—one for a private LAN that supports communication with the directors and switches, and the second for an optional connection to a corporate intranet for remote workstation access. The server supports continuous director monitoring, logging, and alerting; centralizes log

files with McDATA EFCM software, configuration databases and firmware distribution; and supports centralized “call-home,” e-mail, service and support operations. As many as 48 directors and switches can be managed from a single server, and up to eight concurrent users can access the server.

A 24-port Ethernet hub (included and located in the IBM TotalStorage SANC40M cabinet) supports the two connections required by the high-availability function in IBM TotalStorage SAN256M and IBM TotalStorage SAN140M directors. This hub also supports multiple directors and switches connected to a private LAN. One LAN connection is required for each control processor card in the directors.

Sample high-availability cabinet configurations

- *Two IBM TotalStorage SAN256M directors with 512 ports (28U, four 20A power connections)*
- *Three IBM TotalStorage SAN140M directors with 420 ports (36U, six 15A power connections)*
- *Two IBM TotalStorage SAN140M directors with 256 ports (24U, two 15A power connections); eight IBM TotalStorage SAN32M-1 switches with 256 ports (12U, sixteen 15A power connections) for a total of 512 ports*

SANC40M Cabinet at a glance

Physical characteristics

Rack mount space	39U, 1733.5 mm/68.25 in EIA standard
Fibre Channel cables	512
Ethernet LAN cables	24

Dimensions

Depth	1067 mm/42.0 in
Width	660 mm/26.0 in
Height	1880 mm/74 in
Weight (cabinet only)	153 kg/337 lbs
Service clearance	914 mm/36 in

Operating environment

Temperature	4.4° C to 40.0° C/40.0° F to 104.0° F
Relative humidity	8% to 80%

Power requirements

Operating
200 to 240 VAC
Up to 30 amps

Dual power distribution units

4 individual 20A IEC 320 C19 connections
24 individual 15A IEC 320 C13 connections

Product numbers

2027 Model C40
IBM TotalStorage SANC40 cabinet with 40U height for 1U Rack Mount Management Server and 39U for IBM 2026, 2027, 2031, 2032 switches and directors. Two power distribution units, each providing twelve 15A and two 20A power outlets with dual power cords to support high availability.
FC 5030—Ethernet hub, 24-port
FC 9210—IEC 60309 (International) single phase
FC 9211—NEMA L6-30—(North America single phase)

IBM TotalStorage SAN m-type director and switch characteristics

Switch products	Rack height	Power connections	Amps
IBM TotalStorage SAN256M (2027-256)	14U	2 (20A)	12.0
IBM TotalStorage SAN140M (2027-140)	12U	2 (15A)	4.2
McDATA Intrepid 6140 (2032-140)	12U	2 (15A)	4.2
McDATA Intrepid 6064 (2032-064)	9U	2 (15A)	2.0
IBM TotalStorage SAN32M-1 (2027-232)	1.5U	2 (15A)	1.3
IBM TotalStorage SAN24M-1 (2026-224)	1U	2 (15A)	0.7
IBM TotalStorage SAN12M-1 (2026-E12)	1U	1 (15A)	0.4
IBM TotalStorage SAN16M-R (2027-R16)	1U	2 (15A)	.95
Any combination up to	39U	24 15A 4 20A	24

For more information

Contact your IBM representative or IBM Business Partner or visit:

ibm.com/totalstorage/san/m-type



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