



hp data sheet



hp CT9800FC fibre channel converter

The HP CT9800FC Fibre Channel converter is a fast, reliable data transport system that provides Fibre Channel connectivity for HP NonStop tape devices.

features at a glance

- Provides Fibre Channel connectivity for HP NonStop tape drives
- Includes NonStop system level interface
- Supports NonStop S-series platforms
- Available in rack-mounted or tabletop model
- Supports enterprise-class storage

The HP CT9800FC Fibre Channel converter, integrated into the HP NonStop server environment by Tributary Systems, Inc., is a fast, reliable data transport system that allows communications between NonStop servers and native Fibre Channel tape drives. The CT9800FC converter connects directly to NonStop servers via SCSI cable (23 meters maximum) and to the CT9840FC-X native Fibre Channel tape drive via fiber-optic cable (up to 500 meters).

available in rack-mounted or tabletop model

The CT9800FC converter, which can be installed in a rack mount or tabletop, can be connected to native Fibre Channel tape drives in the following storage devices:

- NonStop S-series server enclosures
- CTL700/CTL700M tape library
- StorageTek PowderHorn 9310

fibre channel converter

The Fibre Channel converter transforms SCSI output from the host NonStop server to the Fibre Channel protocol. A copper SCSI cable connects the Fibre Channel converter to a SCSI port on the host NonStop server. A fiber-optic cable connects the converter to the tape drive or to a Fibre Channel interface on the CTL700 or CTL700M tape library.

Note: Very specific requirements exist regarding the cable length and cable type that must be used with the Fibre Channel converter product. Two different fiber-optic cable types, 50/125 and 62.5/125 micron multimode fiber cables, are supported for use with the Fibre Channel converter; however, each has certain limitations. The specific requirements for use of each cable type are included at the end of this document.



fibre channel interface for CTL700 tape library

The Fibre Channel interface for CTL700 tape library allows a CTL700 tape library to be attached to a host NonStop server at distances up to 500 meters. This product changes the SCSI robot control interface of the CTL700 tape library to a Fibre Channel interface. The Fibre Channel interface for the CTL700 tape library may be ordered as a field-installed upgrade for an existing CTL700 or CTL700M tape library, or it may be ordered in conjunction with an order for a CTL700 or CTL700M tape library at the time of the initial order. When included on the same order as a CTL700 or CTL700M product, the Fibre Channel interface will be installed prior to shipment of the tape library.

fiber-optic cable information

The Fibre Channel tape drive products and CTL700 tape libraries equipped with the Fibre Channel interface require multimode short-wave fiber-optic cable to attach to NonStop servers. The connection is made using a NonStop S74000 PMF SCSI port, a NonStop IOMF2 SCSI port, or an HP ServerNet device adapter (ServerNet/DA) with a ServerNet addressable controller (SAC).



The SCSI port on the NonStop S74000 server or later PMF, NonStop IOMF2 SCSI port, or ServerNet/DA is connected to the SCSI port on the Fibre Channel converter. The converter is connected to the Fibre Channel 9840 tape drive or Fibre Channel tape library using multimode fiber-optic cable through an SC connector to the Fibre Channel 9840 tape drive or the Fibre Channel interface, which also have an SC connector. There are three fiber-optic cable choices that can be used.

50/125 micron multimode fiber-optic cable

This cable can be used for connections up to 500 meters in length.

62.5/125 micron multimode fiber-optic cable (for connections up to 200 meters)

62.5/125 micron multimode fiber-optic cables in lengths up to 200 meters are currently used to connect Modular ServerNet Expansion Boards (MSEBs) on NonStop servers.

62.5/125 micron multimode fiber-optic cable (for connections up to 250 meters)

62.5/125 micron multimode fiber-optic cables were sold for use with 519x tape drives. Some cables that were originally purchased for use with a 519x tape drive may also be used to connect a Fibre Channel 9840 tape drive; however, connections can only be made up to a

maximum distance of 250 meters. If a customer is replacing a 519x tape drive with a Fibre Channel interface for CLT700 tape library or a Fibre Channel 9840 tape drive, then it is possible to use the 62.5/125 micron fiber-optic cable that is already installed in a building up to a maximum of 250 meters. If the customer has 62.5/125 micron fiber-optic cables that are longer than 250 meters, these cables cannot be used on the Fibre Channel 9840 drives. The maximum length of 62.5/125 micron multimode cables supported on the Fibre Channel converter is 250 meters. The 62.5/125 micron fiber-optic cables require the use of converter cables and couplers to convert the FDDI connector to SC connectors.

Product numbers for all of the available cables, converter cables, and couplers are listed under "ordering information" below. The NonStop Enterprise Division of HP currently offers fiber-optic cables only up to 200 meters in length.

Note that connections at distances greater than the cable lengths available from HP require a customer-supplied 50/125 micron multimode cable.

The *preferred connection* is to use 50/125 multimode short-wave fiber-optic cable. The advantage of using the 50/125 fiber-optic cable is that the drive can be connected to a NonStop server at distances up to 500 meters.

ordering information

product ID	description
CT9800FC	Fibre Channel extender to SCSI extender
7290	Enclosure with base
7291	Enclosure without base

fiber-optic cable information

62.5/125 micron multimode fiber-optic cables available from hp

product ID	description
676MZ010	Multimode fiber-optic cable, zip cord, 3 m (9.8 ft)
676MZ016	Multimode fiber-optic cable, zip cord, 5 m (16.4 ft)
676MZ033	Multimode fiber-optic cable, zip cord, 10 m (32.8 ft)
676MR082	Multimode fiber-optic cable, ruggedized, 25 m (82 ft)
676MR164	Multimode fiber-optic cable, ruggedized, 50 m (164 ft)
676MR328	Multimode fiber-optic cable, ruggedized, 100 m (328 ft)
676MR656	Multimode fiber-optic cable, ruggedized, 200 m (656 ft)

acceptable 62.5/125 micron multimode fiber-optic cables

product ID	description
F1201	FDDI-to-SC adapter cable set; contains both a 1-meter cable (U33688-A00) and coupler (U36332-A00)
F12CP	U36332-A00 FDDI coupler
F1210	U33690-A00 Marathon (F-PIC) cable, 10 m (32.8 ft)
F1225	U33691-A00 Marathon (F-PIC) cable, 25 m (82 ft)
F1250	U33692-A00 Marathon (F-PIC) cable, 50 m (164 ft)
F12100	U33693-A00 Marathon (F-PIC) cable, 100 m (328 ft)
F12250	U33694-A00 Marathon (F-PIC) cable, 250 m (820 ft)
F1201	FDDI-to-SC adapter cable set; contains both a 1-meter cable (U33688-A00) and coupler (U36332-A00)
F12CP	FDDI coupler
F9-10W	Marathon (3216) cable, 10 m (32.8 ft)
F9-25W	Marathon (3216) cable, 25 m (82 ft)
F9-50W	Marathon (3216) cable, 50 m (164 ft)
F9-100W	Marathon (3216) cable, 100 m (328 ft)
F9-250W	Marathon (3216) cable, 250 m (820 ft)

Notes: Do not use F12-500 or F9-500W with Fibre Channel 9840 tape drives. IBM single-mode GBIC is blue; multimode GBIC is black. Use only multimode (black) GBIC with Fibre Channel 9840 tape drives.





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specifications

Software configuration	HP NonStop Kernel operating system, Release Version Update G06.16 or later
Fibre Channel	Private Loop Direct Attach (PLDA) compliant
Configuration	Tabletop, NonStop S-series cabinet mount
Power	Input voltage: 110/230 V AC Input frequency: 60/50 Hz
Physical data	Dimensions:
	Height 4.3 cm (1.7 in)
	Width 43 cm (17 in)
	Depth 24.1 cm (9.5 in D enclosure)
	Weight 3.6 kg (8 lb)
	Rack-mount (with detachable brackets) or tabletop model
	Front in cabinet



For more information, go to www.hp.com/go/nonstop.

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