SUPERSTACK® II 100BASE-FX FIBER MODULE USER GUIDE

Introduction

This guide covers the following products:

- **SuperStack II 100BASE-FX Fiber Module (3C16970)** — provides a single high-speed fiber port for connection to your network.

- **SuperStack II 100BASE-FX Dual Fiber Module (3C16971)** — provides two high-speed fiber ports, each of which can be used independently to provide two connections, or you can use them as a resilient link.

Both modules are designed to fit into the:

- SuperStack II Switch 1100

- SuperStack II Switch 3300

Installing the Module

Please read the following information before installing this module.

WARNING: *Installation and removal of the module must be carried out by qualified personnel only. Before installing the module into a unit, you must first disconnect the unit from the mains power supply. For full safety instructions, refer to the user guide that accompanies the unit.*

AVERTISSEMENT: *Confiez l'installation et la dépose de ce module à un personnel qualifié. Avant d'installer ce module dans un groupe, vous devez au préalable débrancher ce groupe de l'alimentation 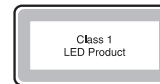secteur. Pour prendre connaissance des consignes complètes de sécurité, consultez le guide utilisateur qui accompagne ce groupe.*

WARNHINWEIS: *Die Installation und der Ausbau des Moduls darf nur durch Fachpersonal erfolgen. Vor dem Installieren des Moduls in einem Gerät muß zuerst der Netzstecker des Geräts abgezogen werden. Vollständige Sicherheitsanweisungen sind dem Benutzerhandbuch des Geräts zu entnehmen.*

WARNING: Fiber Optic ports — Optical Safety.

Class 1
LED Product

Never look at the transmit LED through a magnifying device while it is powered on. Never look directly at the fiber TX port and fiber cable ends when they are powered on.

AVERTISSEMENT: Ports pour fibres optiques — sécurité sur le plan optique.

Dispositif LED
de Classe 1

Ne regardez jamais le voyant (DEL) d'émission en utilisant un dispositif d'agrandissement, tant qu'il est sous tension. Ne regardez jamais directement le port TX (Transmission) à fibres optiques et les embouts de câbles à fibres optiques tant qu'ils sont sous tension.

WARNHINWEIS: Faseroptikanschlüsse — Optische Sicherheit.

LED Gerät
der Klasse 1

Niemals mit einem Vergrößerungsgerät ein Übertragungs-LED betrachten, während dieses eingeschaltet ist. Niemals direkt auf den Faser-TX-Anschluß und auf die Faserkabelenden schauen, während diese eingeschaltet sind.
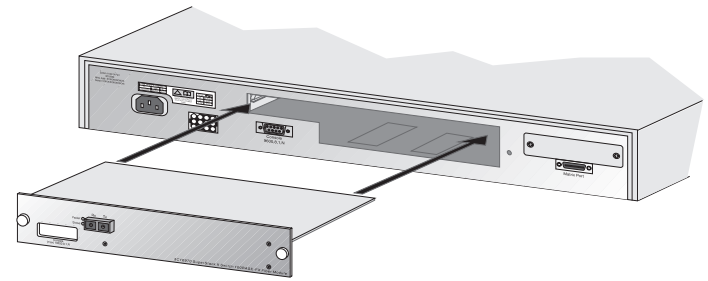
Handling the Module

The module can be easily damaged by electrostatic discharge. To prevent damage, please observe the following:

- Do not remove the module from its packaging until you are ready to install it into a switch.
- Do not touch any of the pins, connections or components on the module.
- Handle the module only by its edges and front panel.
- Always wear an anti-static wristband connected to a suitable earth point.
- Always store or transport modules in appropriate anti-static packaging.

Fitting the Module

To install the module into the switch:

1 Ensure that the switch is disconnected from the mains power supply and you are wearing an anti-static wristband connected to a suitable earth point.

2 Using a small cross-bladed screwdriver, remove the blanking plate from the rear of the switch. Do not remove any other screws from the rear of the switch.

3 Keep the blanking plate and screws in a safe place. If you remove the module at any time, you must replace the blanking plate to prevent dust and debris entering the switch and to aid the circulation of cooling air.

4 Hold the module so that the text on the front panel is oriented correctly, and position the PCB onto the guide rails inside the switch. Push the module fully into the switch, ensuring the connectors are fully engaged. Tighten the two captive thumbscrews securing the module.

Figure 1 Inserting the module into the switch

Connecting Cables and Powering Up

Each port supports half duplex and full duplex operation:

- In half duplex mode, the fiber optic segment cannot exceed 450m (1476ft) in length.
- In full duplex mode, the fiber optic segments cannot exceed 2km (6562ft) in length.

Use 62.5/125 micron 100BASE-FX fiber optic cable with SC connectors.

Connect the module:

1 Remove the protective plastic covers from the fiber connections on the module.

2 Ensure that the switch is powered up.

3 Plug the SC connector on the fiber cable into the fiber socket on the module.

4 Connect the other end of the fiber optic segment to an appropriate 100Mbps device.

5 Check LEDs to ensure correct operation.

Checking LEDs

Once the module is correctly installed and the switch is powered up, check the LEDs on the module and the front of the switch to ensure correct operation.

LED	State	Indicates:
Module LEDs		
Packet	Yellow	Traffic is being transmitted/received on this port
Status	Green	Link is present; port enabled
	Green flashing	Link is present; port disabled
Switch unit LED		
Status	Yellow	Module operating correctly
	Yellow flashing	Unsupported module installed
	Off	No module installed

Removing the Module

To remove the module from a switch

1 Disconnect the switch from the power supply and remove fiber cables from the module.

2 Undo the two captive thumbscrews securing the module into the switch. Do not remove any other screws from the rear of the switch.

3 If you are not fitting another module immediately, you must replace the blanking plate to ensure that dust and debris do not enter the switch and to aid the circulation of cooling air.

Problem Solving

If you suspect a problem, carry out these steps *before* contacting your supplier:

■ Ensure that the devices at both ends of the link are powered up and the connections are secure.

■ Ensure that the module is correctly installed in the switch.

■ Ensure that port configuration is correct.

■ Ensure the Tx and Rx connections are correct.

■ Clean the terminators (fiber cable ends) by wiping them gently with a clean tissue or cotton bud moistened with a little ethanol. Dirty fiber terminators on the fiber optic segment will impair the quality of the light transmitted through the cable.

■ Check that the host switch is operating correctly.

Obtaining Support

For further information on obtaining support, refer to the Technical Support information in the User Guide that accompanies the switch, or visit our World Wide Web site by entering the following URL into your web browser:

`http://www.3Com.com/`

Year 2000 Compliance

For information on Year 2000 compliance and 3Com products, visit the 3Com Year 2000 Web page:

`http://www.3com.com/products/yr2000.html`

Technical Specification

Operating Temperature	0° to 50°C (32° to 122°F)
Storage Temperature	−10° to 70°C (14° to 158°C)
Operating Humidity	10–95% non-condensing
Minimum Output Power	−20dBm
Input Sensitivity	−31dBm
Power Budget	11dBm
Power Consumption	(@5V DC) 3A (15W)

Standards:

Safety	UL 1950
	EN60950
	CSA22.2#950
EMC	
Emissions	EN55022 Class B, FCC Part 15 Subpart B Class A, ICES-003 Class A, AS/NZS 3548 Class B, VCCI Class B
Immunity	EN50082-1
Environmental	EN60068 (IEC 68)

Electromagnetic Compatibility

FCC Statement This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference to radio communications, in which case the user will be required to correct the interference at their own expense.

CSA Statement This Class A digital apparatus meets all requirements of the Canadian interference-Causing Equipment Regulations

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

Warranty Information

The following is a partial description of 3Com Corporation's Limited Warranty statement. For a complete copy of the warranty, see the user guide that accompanies your switch.

3Com warrants its hardware products to be free from defects in workmanship and materials, under normal use and service, for the following lengths of time from the date of purchase from 3Com or its Authorized Reseller:

Network adapters	Lifetime
Other hardware products (unless otherwise specified above)	1 year
Spare parts and spare kits	90 days

If a product does not operate as warranted above during the applicable warranty period, 3Com shall, at its option and expense, repair the defective product or part, deliver to Customer an equivalent product or part to replace the defective item, or refund to Customer the purchase price paid for the defective product. All products that are replaced will become the property of 3Com. Replacement products may be new or reconditioned. Any replaced or repaired product or part has a ninety (90) day warranty or the remainder of the initial warranty period, whichever is longer.

Documentation Comments

Your suggestions are very important to us. They will help make our documentation more useful to you. Please e-mail comments about this document to 3Com at:

pddtechpubs_comments@3com.com

stating the document title, document part number and page number if appropriate.