



SUPERSTACK® II SWITCH GIGABIT ETHERNET SX MODULE USER GUIDE

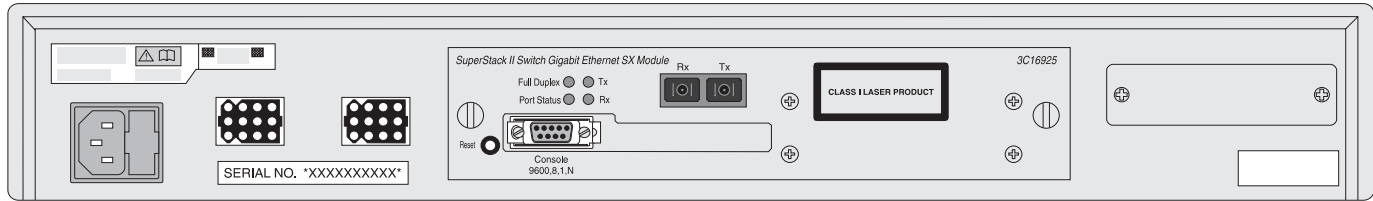


Figure 1 Rear view of a SuperStack II Switch with the Gigabit Ethernet SX Module installed

The Gigabit Ethernet SX Module (3C16925)

The Gigabit Ethernet SX Module provides a 1000Mbps Gigabit Ethernet fiber port for the following units: SuperStack II Switch 1000, SuperStack II Desktop Switch, SuperStack II Switch 3000, LinkSwitch 1000 and LinkSwitch 3000. This port can be used to connect the Switch to the backbone of your network — for example, to a Gigabit switch such as the SuperStack II Switch 9000 SX — or, to a server or endstation with a Gigabit Ethernet connection.



The Module requires agent software version 3.21 or later to be installed on the Switch. For instructions on upgrading agent software, refer to the User Guide supplied with your Switch.

Gigabit Ethernet offers a scalable, end-to-end solution that delivers the highest performance available while maintaining compatibility with existing Ethernet and Fast Ethernet networks. The Module conforms to IEEE 802.3z Draft 3.1 for Gigabit Ethernet, with the exception that only full duplex is supported. The port uses 850nm multi-mode fiber cable with SC connectors, and supports a segment length of 260m (853ft).

LEDs

LEDs on the front of the Switch show the status of the Module and its packet activity. The Module itself also has LEDs, as shown in Figure 1.

LED	Color	Indicates
Located on the front of the Switch:		
Packet	Yellow	Packet transmission or reception on the Module port
Port Status	Green	Link present and port enabled
	Green flashing	Link present and port disabled
	Off	Link failed (or disconnected), or no Module installed
Located on the Module (at the rear of the Switch):		
Tx	Yellow	Packet transmission
Rx	Yellow	Packet reception
Port Status	Green	Link present and port enabled
	Green flashing	Link present and port disabled
	Off	Link failed or disconnected
Full Duplex	Green	Port is operating in full duplex (this LED is always lit)

Installation and Removal



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



Never look directly at the fiber TX laser port and fiber cable ends when they are powered-up.

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



Ne regardez jamais directement le port TX laser à fibres optiques et les embouts de câbles à fibres optiques tant qu'ils sont sous tension.

WARNHINWEIS: Faseroptikanschlüsse — Optische Sicherheit



Niemals direkt auf den Faser-TX-laser-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, 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.

Installing the Module into a Switch

- 1 Ensure that the Switch is disconnected from the mains power supply and that you are wearing an anti-static wristband connected to a suitable earth point.
- 2 Place the Switch on a flat surface. 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 upright, and insert it into the Switch, ensuring the connectors are fully engaged. Tighten the two captive thumbscrews securing the Module.
- 5 Connect the Module:
 - a Remove the protective plastic covers from the fiber connections on the Module.
 - b Ensure that the Switch is powered-up.
 - c Plug the SC connector on the fiber cable into the fiber socket on the Module.
 - d Connect the other end of the fiber optic segment to a device fitted with a Gigabit Ethernet connection.
- 6 Check the LEDs on the front of the Switch to ensure that the Module is operating correctly. Refer to “LEDs” for more information.

Removing the Module from a Switch

- 1 Ensure that the power supply and the fiber backbone connection cables are disconnected from the Switch.
- 2 Place the Switch on a flat surface. 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.

About the Switch Agent Software

Agent software version 3.21 provides support for:

- The Gigabit Ethernet SX Module
- All the functionality available in version 3.1.

When using the Module with version 3.21, note the following:

- The default Spanning Tree Protocol (STP) path cost for the Module port is 60.
- The Module supports the flow control system as defined by IEEE 802.3z Draft 3.1 (Intelligent Flow Management is not supported).
- The Module port cannot be a Virtual LAN Trunk (VLT) port.
- Agent software cannot be upgraded over the Module port.
- The Interactive Access feature of PACE is not supported by the Module port.
- Token Ring Encapsulation is not supported by the Module port.

For further details about version 3.21, see the README file on the agent software disks supplied with the Module.

Problem Solving

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

- Ensure that the Switch in which the Module is fitted is powered-up.
- Ensure that the Module is correctly installed.
- Ensure that the device at the far end of the link is powered-up and operating correctly.
- Reverse the Tx and Rx connections.
- Check that all connectors on the fiber optic segment are all correctly engaged.
- Clean the terminators by wiping them gently with a clean tissue or cotton bud moistened with ethanol. Dirty fiber terminators on the fiber optic segment impair the quality of the light transmitted through the cable.

Technical Specifications

Operating Temperature	0 to 50°C (32 to 122°F)
Operating Humidity	10–95% non-condensing
Power Consumption	20W maximum
Safety Standards	UL 1950 EN 60950 CSA 22.2#950 ECMA 97
Electromagnetic Emissions	CISPR22/EN55022 Class A AS/NZS 3548 Class A FCC Part 15 Class A ICES-003 Class A VCCI Class A

Electro-Magnetic Compatibility

FCC Statement

This equipment has been tested with a class A computing device and has been found to comply with part 15 of FCC Rules. Operation in a residential area may cause unacceptable interference to radio and TV receptions, requiring the operator to take whatever steps are necessary to correct the interference.

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.

VCCI Statement

この装置は、クラスA情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

VCCI—A

Information To The User

If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient the receiving antenna.
- Relocate the equipment with respect to the receiver.
- Move the equipment away from the receiver.
- Plug the equipment into a different outlet so that equipment and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful:

How to Identify and Resolve Radio-TV Interference Problems

This booklet is available from the U.S. Government Printing Office, Washington, DC 20402, Stock No. 004-000-00345-4.

In order to meet FCC emissions limits, this equipment must be used only with cables which comply with IEEE 802.3.

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