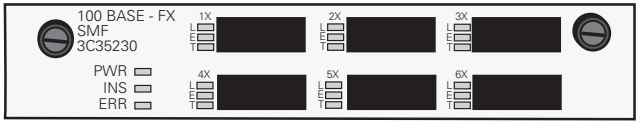
100BASE-FX SMF Fast Ethernet Module Installation Guide

For the CoreBuilder™ 3500 System

Module Description

This module contains six Fast Ethernet 100BASE-FX single-mode fiber (SMF) ports that use fiber (SC) connectors, providing a 100 Mbps Fast Ethernet connection over fiber optic cable. You can remove and replace the module with the system on.

For a description of how to configure this module into your network, see the *CoreBuilder 3500 Getting Started Guide*.



Status LEDs

This table describes the module and port LEDs.

Status	LED	Name	Color	Description
Module Status	**PWR**	Power	Green	The module is receiving power.
	INS	Board Inserted	Green	The module is inserted.
			Yellow	The module is partially inserted.
	ERR	Board Error	Yellow	The module did not successfully complete the power-up diagnostics.
			Blinking Yellow	A hardware/software incompatibility has occurred.
Port Status	**L**	Link	Green	The associated port is active.
	E	Error	Yellow	An error condition has occurred with the associated port, or the port has been disabled through the Administration Console.
	T	Traffic	Blinking Green	The port is receiving or transmitting data.

Audience Description

This guide is intended for **trained technical personnel** only. Do not attempt to remove or replace a CoreBuilder 3500 100BASE-FX SMF Fast Ethernet module if you do not have the proper training from 3Com. For training information, call 1-800-NET-3COM.

WARNING: *Hazardous energy exists within the CoreBuilder system. Use extreme caution when removing or replacing the 100BASE-FX SMF Fast Ethernet module. Always be careful to avoid electric shock or equipment damage. See "Safety Precautions" next.*

Safety Precautions

Be sure that you follow all safety precautions when you add or replace components in a CoreBuilder 3500 system. To avoid electric shocks, burns, or equipment damage, read and follow these warnings:

WARNINGS: *When the system is on, never insert metal objects such as a screwdriver or a finger with jewelry into open module slots.*

When the system is on, do not touch any connections within the chassis with your hands or fingers. Do not insert metal objects into the backplane.

ESD Safety Information

Electrostatic discharge (ESD) can damage components on the module. ESD, which occurs when the module is improperly handled, can cause complete or intermittent failures. To prevent ESD-related damage:

- Always wear an ESD wrist strap, ensuring that the strap makes good skin contact and that you are properly grounded.
- Keep the module in its antistatic shielded bag until you are ready to install it.
- Always handle the module by its edges.
- Do not touch the components, pins, leads, or solder connections.

Fiber Safety Precautions

The 100BASE-FX SMF Fast Ethernet modules use lasers in their fiber optic ports. To ensure your safety when you install or work with these modules, please comply with the precautions in this section.

WARNING: *The fiber optic lasers used in these modules meet the regulatory requirements for casual exposure to the eye. As with any source of bright light, however, 3Com recommends that you do not look into the laser light source.*

IEC 825, Class 1 Laser Devices are for connection only to Class 1 Laser Devices. MMF and SMF fiber optic interfaces use lasers.

CLASS 1
LASER PRODUCT

Before You Install

Before you install your new module, follow the appropriate preinstallation instructions in this section, depending on whether you are installing the initial 100BASE-FX SMF module or replacing one.

Read before installing in an empty slot

Your CoreBuilder system is shipped with no modules installed and with protective faceplates covering the installation slots. Before you install the module, remove the blank faceplate that covers the selected installation slot.

To remove a faceplate:

1. Loosen the two captive screws that secure the faceplate to the chassis.
2. Move the injector/ejector handles to the outward position.
3. Pull the faceplate away from the system. See Figure 1. Save the faceplate for future use.

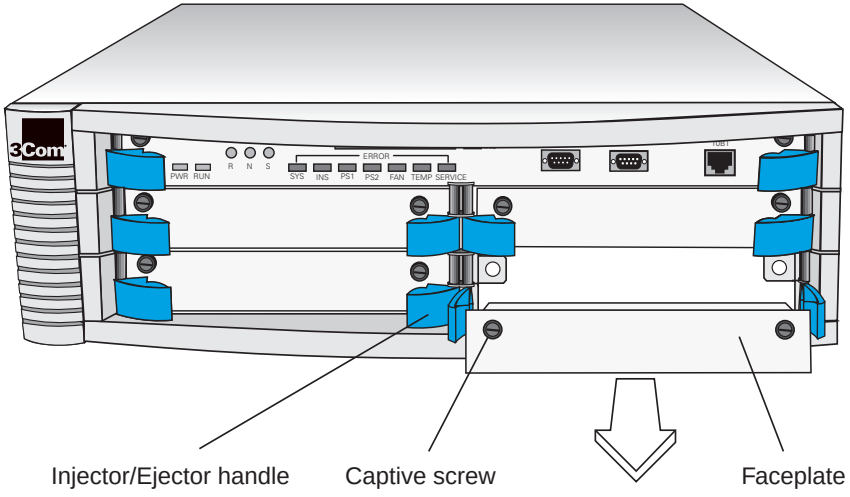


Figure 1 Removing the Blank Faceplate

Read before removing a module

You can remove a module while the system is on.

To remove a module:

1. Record the cabling scheme so that you can correctly recable the new module, and then disconnect the cables from the module's ports.
2. Loosen the two captive screws that secure the module to the chassis.
3. Move the injector/ejector handles to the outward position.
4. Gently slide the module out of the chassis.

Installing the Module

To install a new module into the CoreBuilder system, follow the steps in this section.

CAUTION: *When you handle a module, 3Com recommends that you always use a wrist strap that is connected to a proper ground. This precaution helps prevent electrostatic discharge from damaging the module. Also, when you are not using the module, store it in an antistatic bag.*

1. Put on the ESD wrist strap and ensure that you are properly grounded.
2. Remove the module from its antistatic bag.

WARNING: *If the system is on when you are installing the module, do not insert any metal objects into the open slot (for example, a screwdriver or a finger with jewelry). Doing so can cause burns or other bodily harm, as well as system damage.*

3. With the injector/ejector handles in the outward position, place the module between the guides of the selected slot and gently slide it into the chassis, as shown in Figure 2.
4. To engage the module and backplane connectors, move the injector handles to the inward position. You feel a slight resistance as the connectors engage.

CAUTION: *If the resistance is too great, the module and backplane connectors may not be aligned. Forcing the module inward can damage the board or backplane connectors. If necessary, remove and reinsert the module, ensuring that the connectors are properly aligned. Do not tighten the captive screws to seat the module.*

5. Tighten the captive screws to secure the module in the chassis.

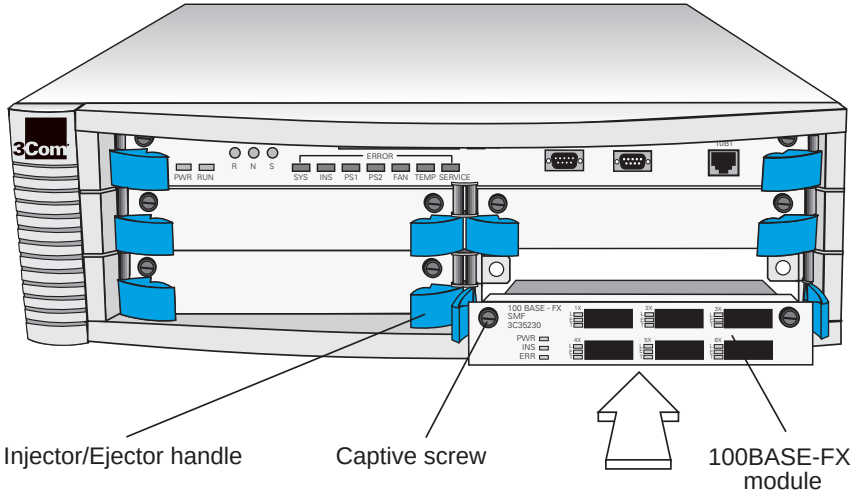


Figure 2 Installing the 100BASE-FX Module

After you have installed the module, see Chapter 4 in the *Getting Started Guide* for information about cabling your module to the network.

The CoreBuilder system resets itself when you install a module with the power on or when you remove and reinstall the power cord.

If you physically change the configuration of the system after you define an IP interface, the port designated for that interface may no longer be valid. You may have to redefine the interface. For information about defining an IP interface, see the Administration Guide.

Module Diagnostics

The CoreBuilder system runs diagnostics tests at power up or when you replace a module with the power on. Watch for these indicators:

- During diagnostics tests, the module's **Error** LED lights yellow.
- When the diagnostics tests are successfully completed, the **Error** LED turns off and the port status **L** (Link Status) LED lights green.
- If a port status **E** (Error) LED remains yellow, the port is not operational.
- If the module's **Error** LED lights yellow, the module has failed a diagnostic test.

To troubleshoot module failures, see Chapter 7 in the *Getting Started Guide*.

3Com Corporation LIMITED WARRANTY

The duration of the warranty for the CoreBuilder™ 3500 100BASE-FX SMF Fast Ethernet Module (3C35230) is 1 year.

HARDWARE

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