Installing a Network Module

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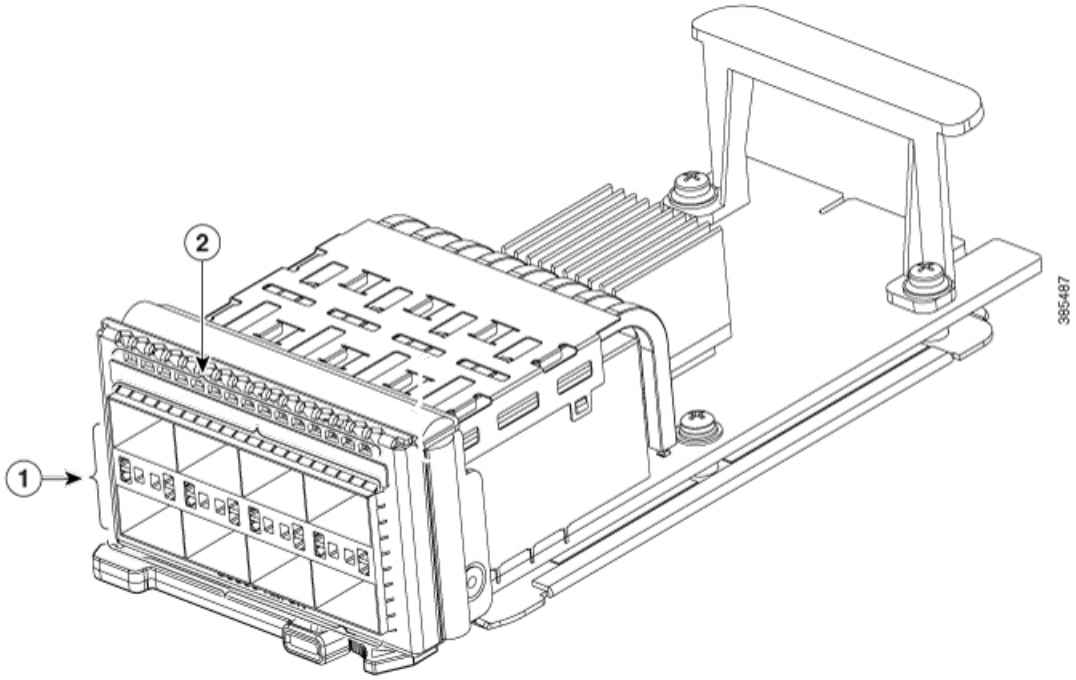
Network Module Overview

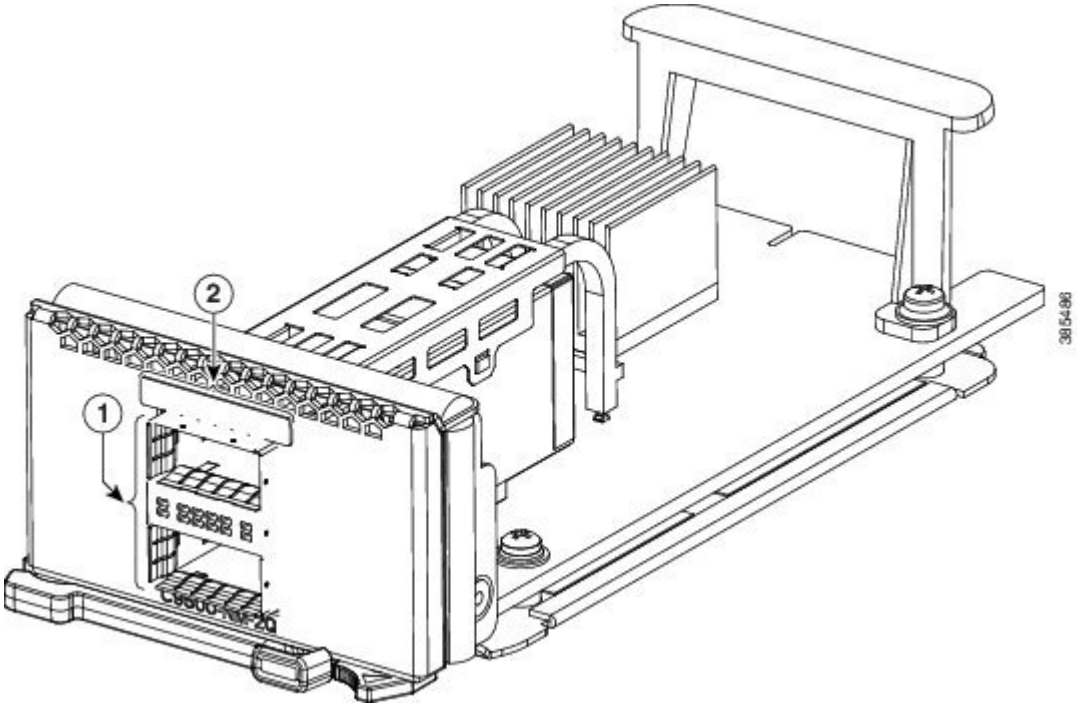
Network Module	Description
C9500-NM-8X	This module has eight 10G SFP module ports. Any combination of standard SFP modules are supported. **Note** This is supported on the following switch models: • C9500-16X • C9500-40X
C9500-NM-2Q	This module has two 40G QSFP module ports. Any combination of standard QSFP modules are supported. **Note** This is supported on the following switch models: • C9500-16X • C9500-40X
Blank Network Module (NM-C4-10G-BLANK)	Insert this blank module when the switch has no uplink ports (this is required for sufficient air flow).

Figure 1: C9500-NM-8X Network Module



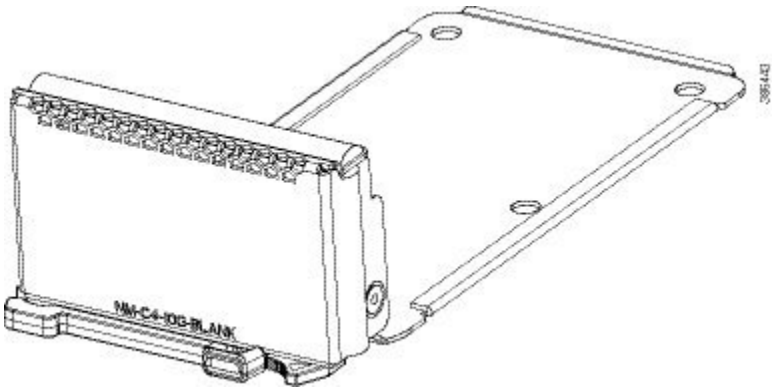
1	SFP module ports	2	LEDs

Figure 2: C9500-NM-2Q Network Module



1	QSFP module ports	2	LEDs

Figure 3: Blank Network Module



Installing a Network Module in the Switch

Installing a Network Module

Note The switch can operate without a network module, but a blank module (with no ports or SFP slots) is available and should be installed when uplink ports are not required.

Note The switch generates logs when you insert or remove a network module with SFP/SFP+/SFP28 slots.

Use only supported network modules and SFP/SFP+/SFP28/QSFP modules. Each module has an internal serial EEPROM that is encoded with security information.

The network module is hot-swappable. If you remove a module, replace it with another network module or a blank module.

Note The switch complies with EMC, safety, and thermal specifications when a network module is present. If no uplink ports are required, install a blank network module.

Before you begin

When installing network modules, observe these precautions:

- Do not remove the blank module from the slot unless you are installing an SFP/SFP+/SFP28/QSFP module. Either a module or a dust plug must be in the slot at all times.

- Do not remove the dust plugs from the fiber-optic SFP/SFP+/SFP28/QSFP modules or the rubber caps from the fiber-optic cable until you connect the cable. The plugs and caps protect the module ports and cables from contamination and ambient light.
- Removing and installing a network module can shorten its useful life. Do not remove and insert a network module more often than is necessary.
- To prevent ESD damage, follow your normal board and component handling procedures when connecting cables to the switch and other devices.

Procedure

Step 1 Attach an ESD-preventive wrist strap to your wrist and to an earth ground surface.

Step 2 Remove the module from the protective packaging.

Step 3 Remove the blank module from the switch and save it.

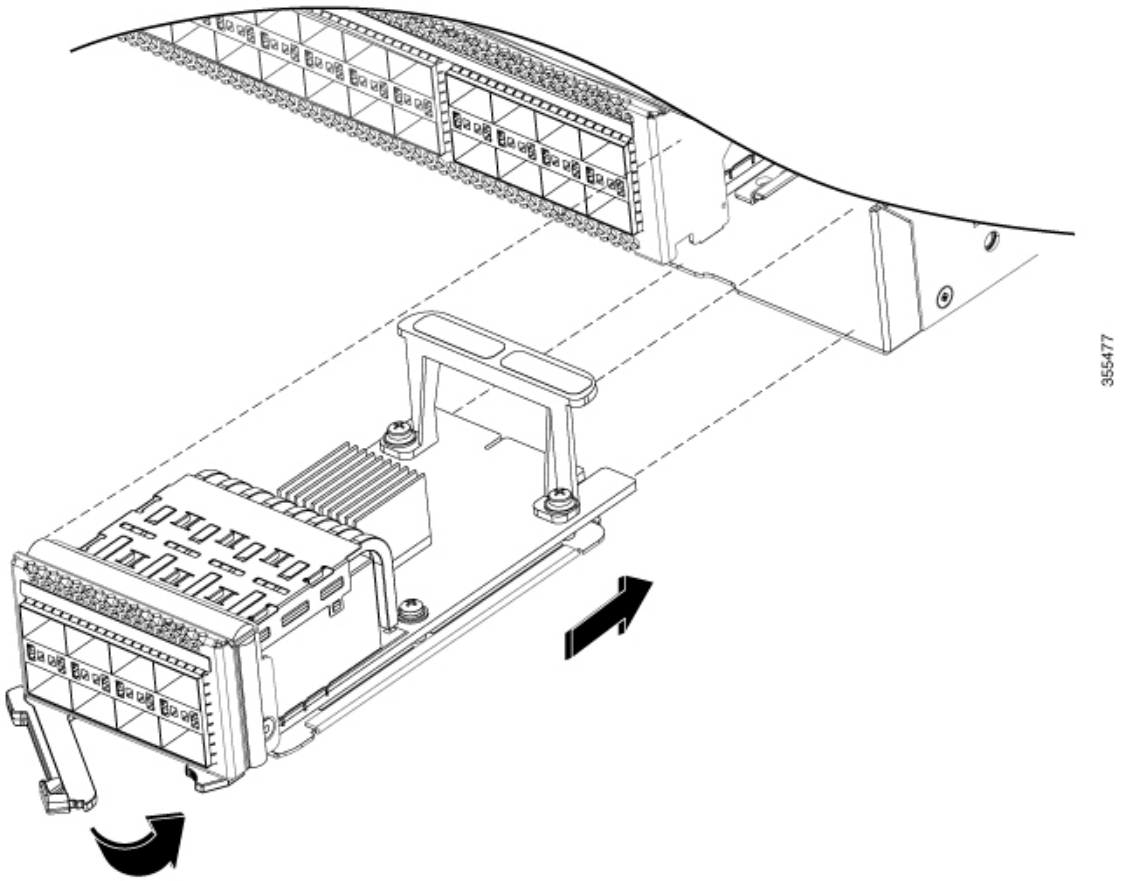
Caution Verify the correct orientation of your module before installing it. Incorrect installation can damage the module.

Caution Do not install the network module with connected cables or installed SFP/SFP+/SFP28 modules. Always remove any cables and modules before you install the network module.

Caution A module interface might become error-disabled when a network module with connected fiber-optic cables is installed or removed. If an interface is error-disabled, you can reenable the interface by using the **shutdown** and **no shutdown** interface configuration commands.

Step 4 Position the module face up to install it in the module slot. Slide the module into the slot until the back of the module faceplate is flush with the switch faceplate. Secure the network module in place by latch.

Figure 4: Installing the Network Module in the Switch



Removing a Network Module

Note The switch complies with EMC, safety, and thermal specifications when a network module is present. If no uplink ports are required, install a blank network module.

Note To avoid authentication failure and non-detection of modules, wait for a minimum of 6-8 seconds between the online insertion and removal (OIR) of network modules.

Procedure

Step 1 Attach an ESD-preventive wrist strap to your wrist and to an earth ground surface

Caution Do not remove the network module with connected cables or installed pluggable transceiver modules. Always remove any cables and modules before you remove the network module.

Caution A module interface might become error-disabled when a network module with connected fiber-optic cables is installed or removed. If an interface is error-disabled, you can reenable the interface by using the **shutdown** and **no shutdown** interface configuration commands.

Step 2 Disconnect the cables from the pluggable transceiver module.

Step 3

Step 4 Release latch and carefully slide the network module out of the slot.

Step 5 Install a replacement network module or a blank module in the slot.

Step 6 Place the module that you removed in an antistatic bag or other protective environment.

Finding the Network Module Serial Number

If you contact Cisco Technical Assistance regarding a network module, you need to know its serial number.

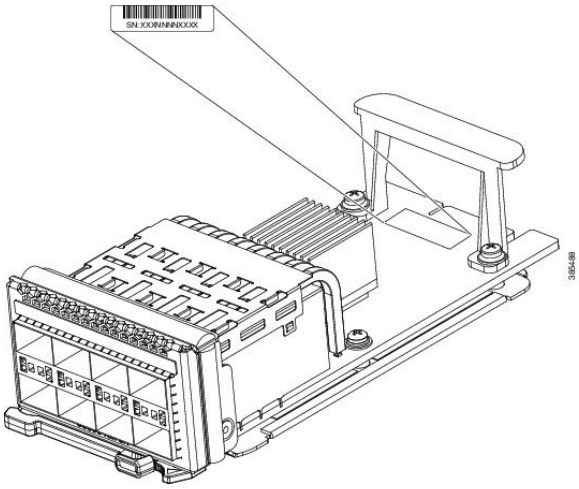



Figure 5: Network Module Serial Number Location