

Cisco C9300-NM-2Y=

Cisco Catalyst 9300 2 x 25G Network Module (Model C9300-NM-2Y=) User Manual

1. INTRODUCTION

This manual provides essential instructions for the installation, operation, maintenance, and troubleshooting of the Cisco Catalyst 9300 2 x 25G Network Module (Model C9300-NM-2Y=). Please read this document thoroughly before installing or operating the module to ensure proper functionality and to prevent damage.

The Cisco Catalyst 9300 series switches are designed for enterprise-class access, aggregation, and core deployments. This network module enhances the capabilities of compatible switches by providing high-speed 25 Gigabit Ethernet connectivity.

2. PRODUCT OVERVIEW

The Cisco Catalyst 9300 2 x 25G Network Module (C9300-NM-2Y=) is a plug-in module designed to expand the network connectivity options of Cisco Catalyst 9300 series switches. It features two 25 Gigabit Ethernet SFP28 module slots, enabling high-bandwidth connections for demanding network environments.

Key Features:

- **Dual 25G SFP28 Slots:** Provides two ports for 25 Gigabit Ethernet connectivity using SFP28 transceivers.
- **Enhanced Bandwidth:** Supports high-speed data transfer for critical network applications.
- **Plug-in Module Design:** Allows for easy installation and hot-swapping in compatible Cisco Catalyst 9300 series switches.
- **Optical Network Support:** Designed for optical fiber connections, offering extended reach and high performance.



Figure 1: Cisco Network Module (Illustrative)

This image displays a Cisco network module, similar in form factor to the Catalyst 9300 2 x 25G Network Module. Please note that the module shown in this illustration features two 40 Gigabit Ethernet ports (C3850-NM-2-40G), while the product covered by this manual (C9300-NM-2Y=) is equipped with two 25 Gigabit Ethernet SFP28 module slots.

3. INSTALLATION

Follow these steps to safely install the network module into a compatible Cisco Catalyst 9300 series switch.

Safety Precautions:

- Ensure the switch is powered off and disconnected from the power source before installation.
- Wear an ESD-preventive wrist strap connected to a grounded surface to prevent electrostatic discharge.
- Handle the module by its edges; avoid touching components or connectors.

Installation Steps:

1. **Prepare the Switch:** Power off the Cisco Catalyst 9300 series switch and disconnect all power cables.
2. **Locate the Module Slot:** Identify an available network module slot on the rear panel of the switch. If a blank cover is present, remove it by unscrewing the captive screws and pulling the cover out.
3. **Insert the Module:** Align the network module with the empty slot. Gently slide the module into the slot until it is fully seated. Ensure the module's connectors engage properly with the switch's backplane.
4. **Secure the Module:** Tighten the captive screws on the module's faceplate to secure it firmly in place.
5. **Reconnect Power:** Reconnect the power cables to the switch and power it on.
6. **Verify Installation:** After the switch boots up, verify that the module is detected and operational through the switch's command-line interface (CLI) or management interface.

4. OPERATING INSTRUCTIONS

Once the network module is installed, you can begin configuring and using its 25 Gigabit Ethernet ports.

Connecting SFP28 Transceivers:

1. **Select Transceivers:** Use only Cisco-qualified 25G SFP28 transceivers compatible with the Catalyst 9300 series.
2. **Insert Transceiver:** Gently insert the SFP28 transceiver into one of the module's 25G slots until it clicks into place.
3. **Connect Fiber Optic Cable:** Connect the appropriate fiber optic cable to the SFP28 transceiver. Ensure the cable type matches the transceiver specifications (e.g., multimode or single-mode).
4. **Verify Link Status:** Check the port status LEDs on the module or use the switch's CLI to confirm that the link is up and operational.

Basic Configuration (CLI Example):

For detailed configuration, refer to the Cisco Catalyst 9300 Series Switch Software Configuration Guide. Below is a basic example for interface configuration:

```
Switch# configure terminalSwitch(config)# interface TwentyFiveGigabitEthernet X/Y/Z  (Replace X/Y/Z with actual interface ID)Swit
```

Note: The interface numbering (X/Y/Z) depends on the specific switch model and slot where the module is installed. Consult your switch documentation for exact interface identification.

5. MAINTENANCE

Regular maintenance helps ensure the longevity and optimal performance of your network module.

Cleaning:

- Keep the module's ports and connectors free from dust and debris. Use compressed air or a lint-free cloth for cleaning.
- When handling fiber optic cables and transceivers, ensure connectors are clean to prevent signal degradation. Use specialized fiber optic cleaning tools if necessary.

Firmware Updates:

Periodically check the Cisco website for firmware updates for your Catalyst 9300 series switch and network module. Keeping the firmware updated ensures access to the latest features, performance enhancements, and security patches. Follow Cisco's recommended procedures for firmware upgrades.

6. TROUBLESHOOTING

This section provides solutions to common issues you might encounter with the network module.

Common Issues and Solutions:

- **Module Not Detected:**
 - Ensure the module is fully seated in its slot and the captive screws are tightened.
 - Verify the switch is powered on and running compatible software.
 - Try re-seating the module or installing it in a different slot (if available).
- **No Link Light / Link Down:**
 - Check the fiber optic cable connection at both ends.
 - Ensure the SFP28 transceiver is correctly inserted and compatible.

- Verify the connected device is powered on and configured correctly.
- Check the switch configuration for the interface (e.g., `no shutdown` command).
- **Performance Issues:**
 - Ensure all connected devices support 25 Gigabit Ethernet.
 - Check for errors on the interface using the switch's CLI.
 - Verify cable quality and length are within specifications for 25G.

If issues persist, consult the Cisco Catalyst 9300 Series Switch documentation or contact Cisco Technical Support.

7. TECHNICAL SPECIFICATIONS

The following table outlines the key technical specifications for the Cisco Catalyst 9300 2 x 25G Network Module (C9300-NM-2Y=).







Feature	Specification
Model Number	C9300-NM-2Y=
Number of Ports	2
Port Type	25 Gigabit Ethernet SFP28
Compatible Devices	Cisco Catalyst 9300 series switches
Connectivity Protocol	Ethernet
Dimensions (L x W x H)	19.69 x 19.69 x 11.02 inches (50 x 50 x 28 cm)
Item Weight	1 pound (0.45 kg)
Mounting Type	Plug-In Mount
Material	Metal
UPC	889728035811

8. WARRANTY AND SUPPORT

Cisco products are backed by a standard limited warranty. For specific warranty terms and conditions applicable to the Cisco Catalyst 9300 2 x 25G Network Module, please refer to the warranty documentation included with your purchase or visit the official Cisco website.

For technical assistance, product documentation, software downloads, and to open a support case, please visit the Cisco Support Community or contact Cisco Technical Assistance Center (TAC) through the official Cisco website: www.cisco.com/go/support.

Related Documents - C9300-NM-2Y=

	<p>Cisco IOS XE Cupertino 17.7.x Stacking and High Availability Configuration Guide for Catalyst 9300 Switches</p> <p>Detailed configuration guide for Cisco IOS XE Cupertino 17.7.x on Catalyst 9300 Series Switches, covering stacking, high availability, NSF/SSO, GIR, 1:1 redundancy, and high-speed stacking for enhanced network resilience.</p>
	<p>Cisco Catalyst 9200 Series Switches Product Overview</p> <p>This document provides a product overview of the Cisco Catalyst 9200 Series switches, detailing various models, front and rear panel components, port types, power supply modules, fan modules, and management interfaces. It includes technical specifications and compatibility information for network modules and transceiver modules.</p>
	<p>Cisco Catalyst 9300 Series Switches Hardware Installation Guide</p> <p>A comprehensive guide for installing Cisco Catalyst 9300 Series Switches, covering hardware components, installation procedures, and configuration.</p>
	<p>Cisco FlexConnect Bonjour Deployment Guide for Cisco DNA Service</p> <p>A comprehensive guide detailing the deployment of Cisco DNA Service for Bonjour with Cisco FlexConnect wireless networks, enabling seamless service discovery and distribution across wired and wireless environments.</p>
	<p>Recommended Software Releases for Cisco Catalyst Enterprise Switching Platforms</p> <p>Find stable Cisco IOS XE software release recommendations for Catalyst 9000 series (9200, 9300, 9400, 9500, 9600) and Catalyst 3650/3850 platforms. Includes details on Standard Maintenance Releases (SMR), Extended Maintenance Releases (EMR), engineering special releases, and open caveats.</p>
	<p>Cisco Cyber Vision Network Sensor Installation Guide for IE3300, IE3400, and Catalyst 9300</p> <p>This guide provides detailed instructions for installing the Cisco Cyber Vision Network Sensor on Cisco IE3300 10G, Cisco IE3400, and Cisco Catalyst 9300 series switches. It covers initial configuration, procedures using the management extension and local manager, and CLI-based installation.</p>