

Cisco SFP-10G-SR=

Cisco SFP-10G-SR 10GBASE-SR SFP Module User Manual

Comprehensive guide for installation, operation, and maintenance.

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of the Cisco SFP-10G-SR 10GBASE-SR SFP Module. This module is designed for high-speed data transmission over multimode fiber optic cables, commonly used in data centers and enterprise wiring closets.

The SFP-10G-SR is a hot-swappable input/output device that plugs into a 10 Gigabit Ethernet SFP+ port on a Cisco switch or router. It connects the host device to a fiber optic network.

2. PRODUCT FEATURES

- Supports 10GBASE-SR standard for 10 Gigabit Ethernet.
- Designed for short-reach multimode fiber applications.
- Class 1 laser product for safety compliance.
- Compact SFP+ form factor for high-density installations.
- Hot-swappable for seamless integration and maintenance.

3. WHAT'S IN THE BOX

Upon opening the package, verify that the following item is present:

- One (1) Cisco SFP-10G-SR= 10GBASE-SR SFP Module

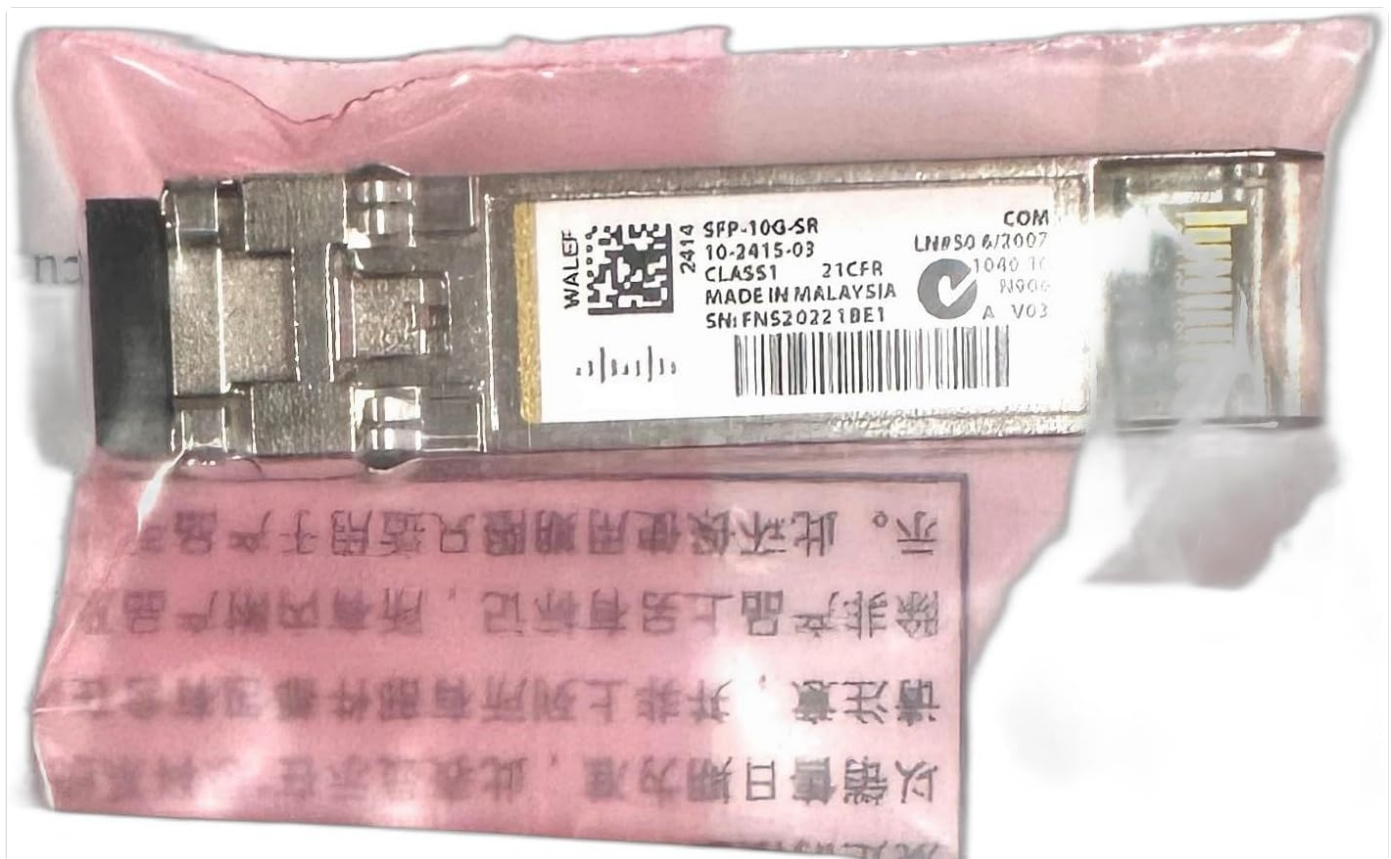


Figure 3.1: The Cisco SFP-10G-SR module, showing its metallic casing and optical interface.

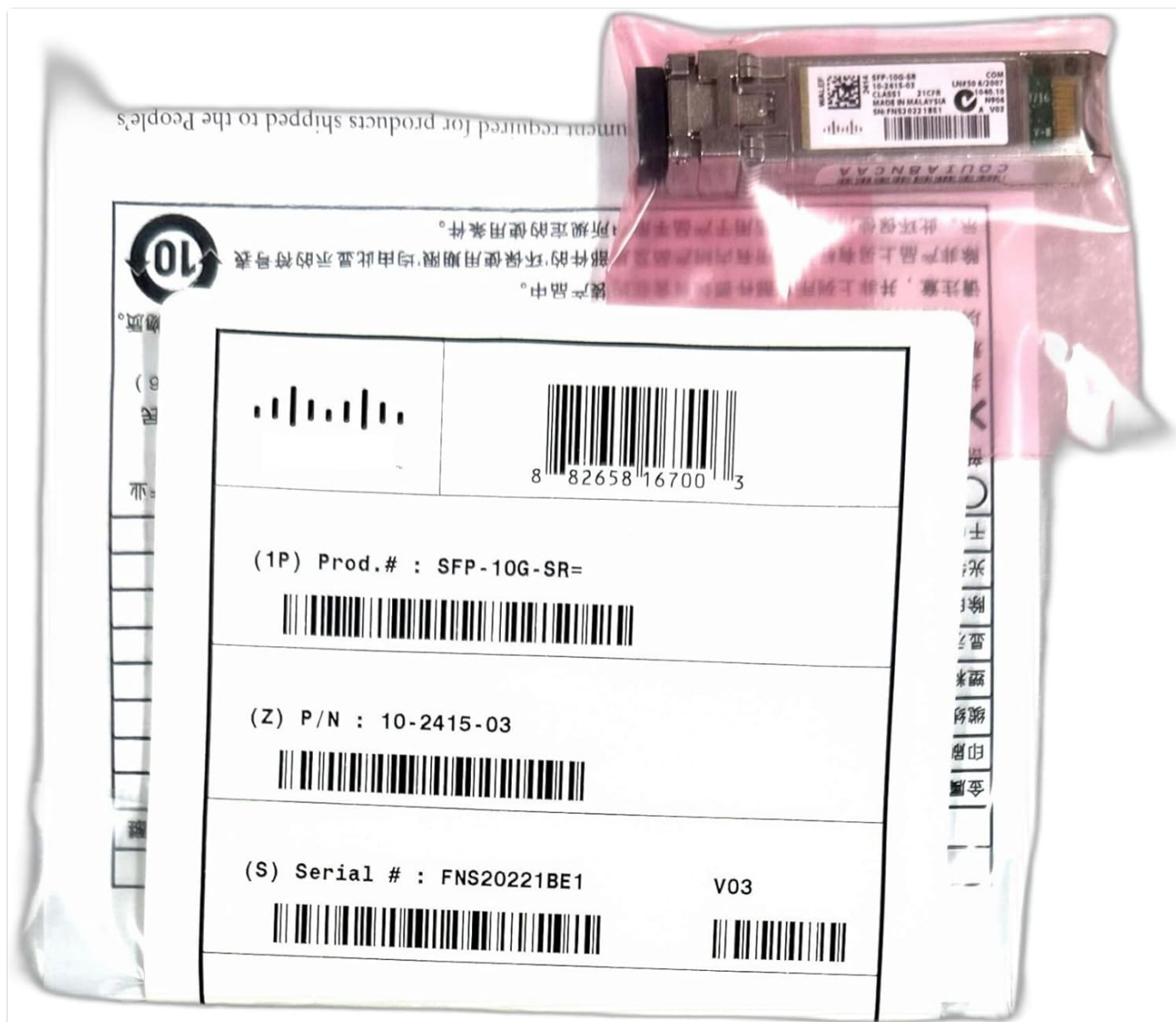


Figure 3.2: Packaging label for the Cisco SFP-10G-SR module, displaying part numbers and serial information. Key identifiers include P/N: 10-2415-03, Prod.#: SFP-10G-SR=, and Serial #: SFNS20221BE1.

4. SETUP AND INSTALLATION

Before installing the SFP-10G-SR module, ensure that the host device (e.g., Cisco switch or router) is powered off or that the port is disabled to prevent accidental damage. Always handle the module by its edges to avoid touching the electrical contacts.

4.1 Safety Precautions

- Wear an ESD-preventive wrist strap when handling the module.
- Do not look directly into the optical ports when the module is powered, as it emits invisible laser radiation.
- Ensure proper ventilation around the host device.

4.2 Installation Steps

1. Orient the SFP-10G-SR module correctly with the SFP+ port on your host device. The module typically has a label on the top side.
2. Gently slide the module into the SFP+ port until it clicks into place. Ensure it is fully seated.
3. Connect the appropriate multimode fiber optic cable to the module's optical port. Ensure the fiber connectors are clean.
4. If the host device was powered off, power it on. If the port was disabled, enable it through the device's command-line interface (CLI) or management interface.

- 5. Verify the link status indicators on the host device to confirm successful connection.

5. OPERATING THE MODULE

The Cisco SFP-10G-SR module operates automatically once installed and connected to a compatible fiber optic network. It facilitates 10 Gigabit Ethernet communication between the host device and the connected network segment.

5.1 Link Status Indicators

Refer to your host device's documentation for specific LED indicators related to SFP+ port status. Generally, a solid green LED indicates a stable link, while a blinking LED may indicate activity or a problem.

5.2 Hot Swapping

The SFP-10G-SR module supports hot-swapping, meaning it can be inserted or removed while the host device is powered on, provided the port is not actively transmitting data. It is recommended to disable the port via software before removal to prevent data loss or errors.

6. MAINTENANCE

The SFP-10G-SR module requires minimal maintenance. The primary focus should be on keeping the optical connectors clean and ensuring proper environmental conditions.

6.1 Cleaning Optical Connectors

- Always use approved fiber optic cleaning tools and methods.
- Never use alcohol or other solvents that may leave residue.
- Inspect connectors for dust or debris before connecting.

6.2 Environmental Considerations

- Operate the module within the specified temperature and humidity ranges (refer to host device specifications).
- Ensure adequate airflow around the host device to prevent overheating.

7. TROUBLESHOOTING

If you encounter issues with the SFP-10G-SR module, consider the following troubleshooting steps:

Problem	Possible Cause	Solution
No Link Light	Module not fully seated. Incorrect fiber cable type (e.g., single-mode instead of multimode). Dirty or damaged fiber connectors. Faulty fiber cable. Port disabled on host device. Incompatible host device or software.	Re-seat the module firmly. Verify fiber cable type (multimode for SR). Clean and inspect fiber connectors. Test with a known good fiber cable. Enable the port via host device CLI/management. Consult Cisco documentation for host device compatibility.

Problem	Possible Cause	Solution
Intermittent Connection	Loose fiber connection. Excessive bending of fiber cable. Environmental interference.	Secure fiber connections. Ensure fiber cable is not sharply bent or kinked. Check for strong electromagnetic interference sources.
Module Not Recognized	Module not fully seated. Host device firmware outdated. Module fault.	Re-seat the module. Update host device firmware to the latest version. Try the module in another compatible port or device.

If the problem persists after attempting these solutions, contact Cisco technical support or your network administrator.

8. SPECIFICATIONS

Attribute	Value
Brand	Cisco
Model Number	SFP-10G-SR=
Part Number (P/N)	10-2415-03
Serial Number (S/N)	SFNS20221BE1
Product Version	V03
Item Weight	0.8 ounces (22.68 grams)
Product Dimensions (LxWxH)	2.22 x 0.53 x 0.33 inches (5.64 x 1.35 x 0.84 cm)
Manufacturer	Cisco Traders 1824990
ASIN	B00SL6DD9K
Date First Available	October 14, 2011
Transceiver Type	SFP+
Data Rate	10 Gigabit Ethernet
Wavelength	850 nm
Fiber Type	Multimode Fiber (MMF)
Max Cable Distance	26m over FDDI-grade MMF 82m over OM2 MMF 300m over OM3 MMF 400m over OM4 MMF
Connector	Dual LC

9. WARRANTY AND SUPPORT

Cisco products typically come with a limited hardware warranty. The exact terms and duration of the warranty may vary based on the region and purchase agreement. For detailed warranty information, please refer to the official Cisco warranty policy documentation available on the [Cisco website](#).

9.1 Technical Support

For technical assistance, troubleshooting beyond this manual, or to report a faulty module, please contact Cisco Technical Assistance Center (TAC). Support resources, including documentation, software downloads, and contact information, are available on the [Cisco Support Portal](#).

When contacting support, be prepared to provide the product model number (SFP-10G-SR=) and serial number (SFNS20221BE1) of your module, along with a detailed description of the issue.

