

# Pull-ring optical module



## AI Overview

The pull ring in an optical module is a mechanical component used to unlock and extract the module safely from its host device while preventing damage to the module or optical fibers.

**Function and Importance** The pull ring serves as the primary mechanical unlocking and extraction mechanism for optical modules such as SFP and QSFP transceivers. When an optical module is installed in a host device, it is secured by internal locking shrapnel. The pull ring allows the user to rotate or pull the module horizontally to disengage the lock without applying excessive force, which could otherwise deform the locking mechanism or damage the optical fibers. Proper use of the pull ring ensures smooth insertion and removal, maintaining the integrity of both the module and the host port.

**Design Features** Modern pull rings are designed to prevent accidental detachment and improve durability. For example, some designs include a rotating shaft connected to the pull ring, which is mounted in a pivot groove on the module base. This configuration reduces the risk of the pull ring falling off during operation and ensures reliable unlocking. Pull rings are typically made from stamped stainless steel or specialty alloys, providing high tensile strength, precise dimensional tolerances, and burr-free edges to avoid fiber damage.

**Color Coding and Identification** In SFP modules, pull rings are often color-coded to indicate the module's wavelength or application. For instance:

- Black (850nm) – Short-distance multimode fiber
- Blue (1310nm) – Longer reach single-mode fiber
- Purple (1490nm) – BiDi applications, such as GPON/FTTx
- Yellow/Green (1550nm) – Long-distance single-mode fiber

This color coding helps technicians quickly identify the correct module for installation and reduces the risk of network errors.

**Operational Guidelines** When removing an optical module:

- Disconnect the fiber first to prevent stress on the optical path.
- Open or rotate the pull ring according to the module design.
- Pull the module horizontally out of the host port. Avoid pulling without opening the pull ring, as this...

## Article Content

### Optical Module Installation and Replacement

The method used to install a copper transceiver module is the same, except that the copper transceiver module connects to a network cable instead of optical fibers. Never look directly into an optical

### Meaning of Optical Module Pull Tab Colors

Optical module pull tab colors serve as a visual language in network operations and maintenance. Their core value lies in simplifying module selection and troubleshooting.

### How to Identify Optical Transceiver Wavelengths by Pull-Tab Color:

In fiber optic networks, accurately identifying the wavelength of an optical transceiver module is essential for ensuring optimal network performance and reliability. One of the most

### Understanding SFP Modules: Wavelength and Color

Each SFP module operates at a specific wavelength, and to avoid confusion, manufacturers use color-coded pull rings for easy identification.

### A pull ring unlocking structure of an optical module

The utility model provides a pull-ring unlocking structure of an optical module, which integrates an upper cover and a sliding block into an integral structure, is quick and convenient to assemble, has good

### The meaning of the optical module with different color pull ring

The pull ring of the optical module adopts the function of using different colors Their main function is to identify the type, wavelength, and function, allowing technicians to quickly determine its type and use

### Pull Ring for Optical Module

Pull Ring for Optical Module, Find Details and Price about Steel Sheet Metal Cutting Sheet Metal from Pull Ring for Optical Module - Shenzhen

### Explanation Of SFP Optical Module Plugging And

The optical module structure and the corresponding host optical port comply with MSA standards. Unified standards are defined for housing

### SFP Module Installation and Removal Guide

SFP modules are an indispensable part of the optical fiber link. Although the installation and removal of SFP modules are very simple, when

Pull ring, unlocking mechanism and optical communication module

The invention relates to a pull ring, an unlocking mechanism and an optical communication module, wherein the unlocking mechanism comprises a base, an upper cover and the pull ring, the pull ring

Unveil the Secrets of SFP Module Installation and

Avoid frequent dismantling of SFP modules to extend their service life. Disconnect all cable connections before installation and removal, and avoid

5G Optical Module Pull Ring Stamping Line: High-Speed Setup

The optical module pull ring acts as the primary mechanical unlocking and extraction mechanism on the exterior of these modules. Despite its minimal footprint, the pull ring must meet

SFP optical module

The composition of the SFP optical module is: Laser (including transmitter TOSA and receiver ROSA), circuit board IC and external accessories The external accessories are composed

How to Distinguish the Wavelength by the Color of the

CWDM optical module, the color of its pull ring is colorful. There are 18 wavelengths in total, and the band is divided into prewave and postwave, the

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That is, the present disclosure solves a technical problem that it is difficult for the optical module to be plugged and unplugged on intensive cabinets, and during the unlocking process, it is...

Pull ring device suitable for optical module

Pull ring device suitable for optical module Abstract The utility model discloses a pull ring device suitable for an optical module, and belongs to the technical field of optical communication.

Optical module using pull tab for unlocking

The optical module is applicable to a photoelectric module for limiting the maximum height after rotation of the pull tab (1), and is applicable to a communication device with high-density ports; a color scale

SFP Metal Pull Ring | Optical Module Accessory

SFP metal pull ring for optical modules. Durable stainless design ensures secure grip, easy installation and removal with long-lasting reliable performance.

The Most Comprehensive Guide Of Optical Modules

Explore the ultimate guide to optical modules. Learn types, functions, performance metrics & how to choose the right module for your fiber network.

Pantone 475u TPV Plastic Pull Ring for Optical Module

Pantone 475u TPV Plastic Pull Ring for Optical Module, Find Details and Price about PVC Injection Molding Parts Plastic Parts from Pantone 475u

Optical module pull ring unlocking mechanism and method

The optical module pull-ring unlocking mechanism provided by the invention has a simple structure, combines several functions on a few parts, solves the problems of insufficient housing space, many

Meaning of Optical Module Pull Tap Colors

4. 10G SFP+ Optical Module Pull Ring Colors 10G SFP+ red pull tab = ER 40km, white pull tab = ZR 80km; this color rule is the mainstream standard among mainstream brands including

WO/2025/157176 OPTICAL MODULE

The unlocking component comprises a pull ring, an unlocking member, and an elastic member. The pull ring comprises: a first support arm, a second support arm, a third support arm and

Introduction of SFP Optical Module| Four-Faith

Generally, manufacturers will distinguish the color of the pull ring. For example, the black pull ring is multi-mode and the wavelength is 850nm; blue

SFP Pull Ring Rectangular Blue | Optical Module Accessory

Rectangular blue SFP pull ring for optical modules. Durable, easy-grip design ensures quick installation and removal with reliable performance and long service life.

How to Identify Optical Transceiver Wavelengths by Pull

One key method of visual identification is the color of the transceiver's pull tab, which corresponds to its wavelength. This article provides a professional

Pull ring and optical module

An optical module and rotating rod technology, applied in the field of optical communication, can solve the problems of user inconvenience, difficulty in picking up the tongue, and easy sliding of the tongue.

5G Optical Module Pull Ring Stamping Line: High-Speed Setup

Executive Summary: Implementing a specialized 5G optical module pull ring stamping line directly dictates the yield rate and output volume of critical data center hardware components.

## Contact Us

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