

Various colors of optical modules



Article Overview

Optical module colors, typically seen on pull-tabs, indicate the module's wavelength, fiber type, and transmission distance, enabling quick identification and error-free deployment.

Purpose of Color Coding

Optical modules, such as SFP, SFP+, QSFP, BiDi, and CWDM, use colored pull-tabs as a visual coding system. These colors help technicians quickly identify the module's wavelength, compatible fiber type, and transmission distance without unplugging it, streamlining maintenance and reducing errors in high-density network environments.

Common Color Codes by Module Type

1. Standard Single-Mode and Multi-Mode Modules

- Blue: 1310nm, medium-distance transmission
- Purple: 1490nm, medium-distance transmission
- Yellow: 1550nm, long-distance transmission (40 km+)
- Green: 1550nm, extended reach (80 km+)
- Black: 850nm, typically multi-mode short-distance transmission

2. BiDi (Bidirectional) Modules

- BiDi modules transmit and receive on a single fiber using different wavelengths for each direction. Pull-tab colors indicate the specific wavelength pair, which must be verified via the module label for accuracy.

Article Content

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Optical Module Guide: Demystifying Optical Modules

Optical modules are essential components in modern communication networks, enabling

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Common Optical Modules and Interfaces for Switches

Among their various components, optical modules and optical interfaces are vital for enabling

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Introduction To The Differences Between Gray Light Modules And Color ...

- Definitions and Differences Between Gray and Color Light Modules • Gray Light Module (Grey) The optical

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Optical module design resources | TI

View the TI Optical module block diagram, product recommendations, reference designs and start designing.

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The Key External Components of Optical Modules

An optical module serves as the backbone of modern fiber-optic communication. Its appearance often resembles a

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What is an optical module? Optical module wiki

An optical module, also called fiber optic transceiver or optical transceiver, is a typically hot-pluggable device used in

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Grey Transceiver vs. Color Transceiver: Understanding

Among the various types of transceivers, grey and color transceivers are commonly

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What Is an Optical Module

On an optical network, a sender needs to convert electrical signals into optical signals before sending them to a receiver, and the

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The Most Comprehensive Guide Of Optical Modules

Explore the ultimate guide to optical modules. Learn types, functions, performance metrics

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Optical Module: A Comprehensive Analysis from Source to Terminal

Optical modules are key transmission components in communication networks, and their applications, technologies,

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What types of optical modules are there?

With the continuous development of technology, optical modules will appear in more diverse types and specifications, providing more

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Things You Need to Know About Optical Modules and Wavelengths

Introduction What are optical modules used to build a campus network? What are differences between various optical

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Understanding Optical Modules

Optical modules are available in various types to meet diversified requirements. Classified by transmission rates Depending on

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Meaning of Optical Module Pull Tap Colors

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

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The Ultimate Guide to SFP Modules (2026): Types, Speeds

Confused by SFP vs SFP+? Read the definitive 2026 guide on SFP modules. We explain Single Mode vs Multimode, DDM

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What is SFP Module? An Ultimate Guide (2024)

An SFP module is a small, pluggable optical transceiver that fits into the SFP port of a

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FS Community

Hier sollte eine Beschreibung angezeigt werden, diese Seite lässt dies jedoch nicht zu.

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The Big Differences Between SFP, SFP+, SFP28, QSFP+, QSFP28,

Introduction In today's data-driven world, the role of optical modules has become increasingly critical. These small

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Understanding Optical Modules: Types and Troubleshooting Guide

Optical modules come in various types, and their external structures are not exactly the same. However, their basic compositional

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Introduction To The Differences Between Gray Light Modules And Color ...

This means gray and color light modules do not emit gray or colored visible light — the names refer to wavelength

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Optical module

An optical module is a typically hot-pluggable optical transceiver used in high-bandwidth data communications applications. Optical

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What Is An Optical Module?

An optical module converts electrical signals to light for fast, reliable data transfer in networks, essential for cloud

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How to Choose Optical Modules Correctly?

How Optical Modules Operate Transmitter Optical Sub Assembly (TOSA) The TOSA manages light emission,

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What Are the Common Types of Optical Modules?

What Are the Common Types of Optical Modules? Classification by Transmission Rate To meet various transmission rate

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Optical Module Pull Tab Colors: The Ultimate Guide to SFP, QSFP,

Description: Decode optical module pull tab colors for SFP, QSFP+, BIDI, and CWDM modules. Learn how color

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The Evolution of Optical Modules: Powering the Future

Enter optical modules, which leverage the power of light to transmit data efficiently over long

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Understanding Optical Modules: Working Principles, Structures, and ...

Explore the working principles, structures, and performance metrics of optical modules, essential components of

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A Quick Guide to Gray Light Module and Colored Light Module

In this case, a 25G IPL module is required. The 25G color light module can be divided into 25G CWDM6 wave and

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Understanding Optical Modules: A Comprehensive Guide

Optical Module Basics: Understanding the Core Concepts Optical modules are compact devices that convert electrical

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Understanding Transceiver Pull Tab Colors: Wavelengths & Fiber Types

Learn how to identify optical transceivers by pull tab color. This guide explains wavelength, distance, and fiber

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

Understanding and utilizing pull-tab colors is a practical, efficient way to manage optical transceiver modules and

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Optical Module Classification and Common After-Sales FAQs

Explore the classification of optical modules based on transmission rate, package type, mode, central wavelength, and

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Optic Modules Datasheet

Data Sheet datasheet is intended to guide the user through the various options available when choosing an optic module for a given

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Optical module

Different optical wavelengths, also referred to as lambdas, of light are multiplexed in some optical modules using wavelength-division

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Comprehensive Guide to Optical Transceiver Classifications and

Introduction Optical modules are critical components in fiber optic communications, enabling the conversion between

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What is Optical Link Module?

The optical link module, known as Optical Transceiver in English, is a general term for various module categories, including optical

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