

What is 850nm optical module



Overview

850nm: SFP modules operating at 850nm wavelength are typically used for shorter-distance transmissions over multimode fiber (MMF). When engineers search for “SFP wavelength,” they are typically trying to answer a practical deployment question: Which optical wavelength should I use—850 nm, 1310 nm, or 1550 nm—and why does it matter?

The answer directly affects fiber compatibility, transmission distance, link stability, and. The main difference between SFP modules operating at 1310nm and 850nm is the wavelength at which they transmit optical signals. Here's a breakdown of the key distinctions between SFP. The three most common wavelengths used in modern optical networks are 850 nanometers (nm), 1310nm, and 1550nm. Each wavelength window has distinct physical properties, advantages, limitations, and ideal use cases that make it suitable for particular applications.



Article Content

May 26, 2026

850nm SFP Transceiver Guide: Uses, Specs & Fiber Types

An 850nm SFP (Small Form-factor Pluggable) transceiver is a hot-swappable optical module designed to support Ethernet data transmission over multimode fiber (MMF).

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The selected wavelength determines fiber compatibility. 850 nm SFP modules are designed for multimode fiber (MMF), where modal dispersion limits transmission distance but ...

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What Does “nm” in SFP Mean?

Each wavelength used in SFP optical modules has distinct characteristics and advantages, making them suitable for various applications. Understanding these differences helps network designers choose ...

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The relationship between wavelength and transmission distance of ...

The commonly used wavelengths in optical fibers are 850nm, 1310nm, and 1550nm, which have longer waveforms and therefore have relatively less attenuation. Moreover, these three wavelengths have ...

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Common Optical Wavelengths: 850nm, 1310nm, 1550nm – ...

First Window (850nm): The earliest window used for fiber optic communications, centered around 850nm. This window has higher attenuation compared to longer wavelengths but was the first ...

Contact Us

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