1310 Optical Module Distance



Overview

When connected to a 10GBASE-ER standard optical module (1550 nm, 10 Gbit/s, 40 km), an SFP-10G-ER-1310 optical module supports only 20 km of maximum transmission distance. As part of the O-band (1260–1360 nm), it balances low dispersion, stable performance, and cost efficiency. This makes it widely adopted in data centers, enterprise backbones, and metro access. Choosing the right optical module requires evaluating multiple factors, including fiber type, wavelength (850nm vs. 1310nm), link budget, and real installation conditions, rather than relying solely on datasheet specifications. In this guide, we will break down what SFP distance really means, how. The distance that a 1310nm SFP (Small Form-Factor Pluggable) transceiver module can reach depends on the specific type and standard of the module. Here are some common types: Reach: Typically used for. Take 2. 4db/km, the output optical power is -2~3, the conventional receiving sensitivity is -24, but this customer requires the receiving sensitivity to. Among the different kinds of optical fibers, the 1310nm wavelength has some unique features and uses.

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Article Content

SFP Distance Explained: Real-World Range, Limits, and Optics

A 1310nm LR module is designed for single-mode fiber and significantly longer distances. Even if both modules operate at different speeds (1G, 2.5G, or 10G), their distance limitations remain

How far can a 1310nm SFP go？

The distance that a 1310nm SFP (Small Form-Factor Pluggable) transceiver module can reach depends on the specific type and standard of the module. Different 1310nm SFP modules are

2.5G Wavelength 1310nm Can you transmit 60km?

The good or bad degree of the optical device determines the transmitting optical power and receiving sensitivity, which also determines the transmission distance of the gigabit optical module.

Understanding 1310nm Fiber: A Comprehensive Guide

Explore the complexities of 1310nm fiber wavelengths in this comprehensive guide. Learn about fiber optics, optical transmission, and more.

What Do 850nm, 1310nm and 1550nm Actually Mean in Optical

Learn what 850nm, 1310nm, and 1550nm mean in optical transceivers. Discover the differences between SX, LX, and ZX optics, transmission distances, fiber types, and how to choose

SFP-10G-ER-1310

When connected to a 10GBASE-ER standard optical module (1550 nm, 10 Gbit/s, 40 km), an SFP-10G-ER-1310 optical module supports only 20 km of maximum transmission distance.

The relationship between wavelength and transmission distance of ...

You can choose 1310nm or 1550nm for distances between 20-40km. 1550nm wavelength is usually used for distances greater than 40km. Below are several commonly used wavelengths and their

Module SFP 1,25 LX, 1310nm, 20km, 2xLC (14dB), DDM

Designed to work in single-mode optical fiber (Single-mode fiber, SMF), maximum range 20 km, optical budget 14dB, LC connector, working wavelength Tx 1310 nm. DDM function support*.

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10GE SFP+ Optical Modules

Fan Modules Installing a Power Surge Protector Pluggable Modules for Ports Understanding Optical Modules Understanding Copper Modules Understanding Hybrid Modules Guide to Using Pluggable

H3CSFP-XG-LX-SM1310-S 10G SFP+ Multi-mode Optical Module

High quality H3CSFP-XG-LX-SM1310-S 10G SFP+ Multi-mode Optical Module from China, China''s leading product market Fibre Channel Switch product market, With strict quality control Fibre

What Is an Optical Module and Its FAQs (V200)

What Is an Optical Module and Its FAQs (V200) Describes what an optical module is and FAQs, including the fundamentals, appearance and structure, key performance counters, common types,

Cisco 10GBASE SFP+ Modules Data Sheet

Cisco SFP-10G-T-X module The Cisco 10GBASE-T module (Figure 2) offers connectivity options at the following data rates: 100M/1G/10Gbps. It has the SFP+ form factor and an RJ-45 interface so that

40Gbps QSFP+ Optical Modules

1Gbps eSFP Optical Modules 10Gbps SFP+ Optical Modules 40Gbps QSFP+ Optical Modules 100Gbps QSFP28 Optical Modules Cables Hardware Installation Maintaining the Hardware

TTL Optical Transceiver Module 60KM 5.5-26V Optical Terminal

Descriere TTL Optical Transceiver Module 60KM 5.5-26V Optical Terminal Equipment Drones TTL to Fiber Optic Module TX SkyEnd This TTL optical transceiver module is designed for

400G Optical Modules Explained: SR4 Vs. DR4 Vs. FR4 Vs. LR4

Key differences between SR4, DR4, FR4, and LR4 400G optical modules. Expert advice from Asterfusion engineers to optimize your data center network.

1G Bidirectional Single-Mode Optical Module

SFP transceiver that supports 1G connections up to 3 km using single-mode fiber with a simplex LC UPC connector.

Dell SFP Module

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Dell 320-2878 for $322.43 - Dell Sfp Module - For Data Networking, Optical Network - 1 X Lc 1000base-lx Network - Optical Fiber 3202878 at CompSource as of Saturday Jul 11, 2026

Arista Optics Modules and Cables

Arista''s Optical Modules and Cable portfolio offer a wide variety of high-density and low-power 800G (dual 400G), 400G, 200G, 100G, 50G, 40G, 25G, 10G, 1G, and 100M Ethernet connectivity options

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Technical inquiry: https://fdsoluciones.es/project-enquiry.html

This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.

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