

Are there any optical modules with a range of 20km



Summary of Content

For a 20km transmission distance, single-mode SFP, SFP+, or QSFP28 optical modules are commonly used, typically operating at 1310nm wavelength.

1G SFP Modules

For Gigabit Ethernet (1.25Gbps), SFP optical modules designed for 20km use single-mode fiber and a 1310nm wavelength. These modules are hot-pluggable, use LC connectors, and comply with SFF-8472 standards. They convert electrical signals to optical signals for transmission and back at the receiving end. Typical applications include enterprise campus networks, metropolitan access networks, and infrastructure monitoring systems. They require pairing with compatible SFP ports on switches or fiber converters for proper operation .

10G SFP+ Modules

For 10Gbps links, SFP+ LR (Long Range) modules are suitable for 20km over single-mode fiber. These modules also operate at 1310nm and are designed for long-distance transmission in metro networks or large campus environments. They offer low power consumption, compact size, and high density, making them ideal for upgrading existing network infrastructure without replacing hardware .

100G QSFP28 Modules

Article Content

What Are Long-Distance Optical Modules? Guide to Types, Specs,

Svelol offers a range of high-performance long-distance optical modules known for their excellent stability and cost

MGB-TLX Mini GBIC LX Module

GBIC LX Module Planet Technology USA's extended temperature 1000Mbps Gigabit SFP Fiber

What Are the Key Parameters of Optical Modules

Understand the key parameters of optical modules, including transmission rate, distance, wavelength, and fiber

Vega - Ultra Long-Range Multi-Sensor PTZ Camera System

A fully customizable multi-sensor PTZ camera boasting our longest range day/night zoom camera and our most advanced cooled or

Multi-mode optical fiber

Multi-mode optical fiber is a type of optical fiber mostly used for communication over short distances, such as within a building or on a

25G SFP28 20km SMF Transceiver

Our 25G SFP28 20km transceiver delivers extended-reach connectivity for metropolitan area networks. Supporting up to 20km

10G SFP+ module SM 20KM 40KM 80KM TX/RX 1270/1330nm,single

10G SFP+ module SM 20KM 40KM 80KM TX/RX 1270/1330nm,single fiber Bidi,LC port DDM SFP transceiver The SFP transceivers

SFP+ BiDi WDM 10GbE 20km Universal Optical Transceiver

The 10G SFP+ BiDi WDM optical transceiver transmits data over single mode fibre at a distance of up to 20km. The transceiver

SFP+ Single Mode LC Module (20km)

Transmission distance of up to 20km (12.42 mi.) Duplex LC optical interface Supports data rates of up to

SFP Dual Wavelength Single Mode LC Module (20km)

TRENDnet's SFP Dual Wavelength Single Mode LC Modules are compatible with standard SFP slots found on network switches and

How to Estimate an Optical Module's Transmission Distance | FiberMall

Optical modules distinct from one another in their transmission distance, a feature that should be taken into account in

10G SFP+ LR-20KM (1310nm)

The 10G SFP+ LR-20KM (1310nm) - OptiLink is a long-range 10Gbps optical transceiver, designed for

1G SFP ELX Transceiver Options for 10-20km

Learn how 1G SFP transceivers such as ELX modules ensure stable 10-20km transmission in campus, metro access,

SFP Dual Wavelength Single Mode LC Module (20km)

Each single mode SFP transceiver is equipped with a simplex LC fiber connection interface, and supports high-speed data rates up

Exploring the Correlation Between Optical Module Wavelength and ...

The operating wavelength of an optical module is a range measured in nanometers (nm). Optical modules can be

SFP+ for short distance?

I'm a bit confused, the optics you mention in bold are multimode 300m optics but you also mention having 20km

10G BiDi SFP+ 20km Tx1270/Rx1330 | €16.33 | EDGE Optical Solutions

The BIDI-10G-SFP-20A (Tx1270/Rx1330) will pair with any SFP+ MSA-compliant Tx1330/Rx1270 BiDi module that meets the 9 dB

Cisco QSFP-100G-B20U4-I and QSFP-100G-B20D4-I 100G 20km

Whether it's building a network or upgrading an existing network, the Cisco® QSFP-100G-B20U4-I and QSFP-100G-B20D4-I

Best Long Range Drones 2026 (15-200km): Expert Tested & Review

Our in-depth review compares 9 long range drones, considering factors like range, battery life, camera quality, and more.

Optical module selection for long-distance transmission

For example, optical modules from different vendors may have differences in temperature range, size specifications,

Single-mode fiber for short distances e.g. < 1 km

Typically any optic (sfp) that is rated for 10km will work for short distance. Think of it as a range... 0-10km, 10-20km, 20-30 and so on.

SFP 20km Selection Guide: Key Specs for 1G Transceiver

An SFP 20km transceiver is a small form-factor pluggable optical module designed to transmit Gigabit Ethernet signals over

Fiber Optic Cable Range: Comprehensive Guide

Fiber optic cable range varies depending on whether you're using single or multimode fiber. Learn the potential for

10G Optical Modules: Short-Range vs. Long-Range

Understand short-range and long-range 10G optical modules in terms of distance, budget,

Optical Modules Compared: When to Use Long-Range

How Long-Distance Optical Modules Work In practice, the maximum reach of a long

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

Understand SFP distance, fiber optic range, and real-world limits of SR/LR modules. Learn how wavelength, fiber

MGB-TLX Mini GBIC LX Module

These Small Form Factor Pluggable (SFP) transceiver modules operate with an integrated duplex data link

Contact Us

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