ZITHA TECH SPECIALTY CABLES (Pty) Ltd

160km Single-Optical Module Optical Attenuation



Overview

Our transceiver modules are available for commercial and industrial applications, supporting varying distances from 500m to 160km, depending on multimode or single-mode fiber.

Key Takeaways

Supporting 160km transmission over single-mode fiber at 1550nm wavelength, this premium module delivers outstanding 37 dB link budget with speeds from 100Mbps to 1. LC/UPC connectors enable deployment in the most demanding carrier backbone networks. For example, mainstream Gigabit Ethernet modules labeled "ZX" often claim 80km to 120km reach. Long-haul versions pushing beyond 120km are. SFP module is a small form factor, compact, hot-pluggable optical transceiver, also called mini-GBIC. Our SFP module comply with the SFF-8472 MSA (Multi-Sourcing Agreement), CE, FCC, RoHS, and corresponding industry standards. Moreover, they have a built-in DOM/DDM function as default for easy. The Miljet MJ-SFPGE-EZX-160, SFP 1000BASE-EZX transceiver uses a longer wavelength 1550nm laser on Single Mode fiber (SMF), has a range of up to 160km over Single Mode fiber optic cables, using 2 fibers through connectors LC reaches up to 1. This optical transceiver offers. Our 1. Note that the lower wavelengths have a higher attenuation on standard SM. The SFP transceivers are high performance, cost effective modules supporting dual data-rate of 2. The transceiver consists of three sections: a DFB laser transmitter, a APD photodiode integrated with a trans-impedance preamplifier (TIA) and MCU.

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Article Content

SFP Module – Optcore

Our transceiver modules are available for commercial and industrial applications, supporting varying distances from 500m to 160km, depending on multimode or single-mode fiber.

1.25G SFP 160km | Maximum Reach

Our 1.25G SFP 160km transceiver provides maximum-reach gigabit connectivity for ultra-long-haul applications. Supporting 160km transmission over single-mode fiber at 1550nm

SO-SFP-100BASE-L160D-CXX

The optical performance provides a bridgeable distance of up to 160 km depending on the actual optical path attenuation. Note that the lower wavelengths have a higher attenuation on standard SM fiber.

2.5Gbps SFP 1550nm Optical Transceiver, 160km LC

* 1550nm DFB laser and APD photodetector for 160km transmission. * Compliant with SFP MSA and SFF-8472 with duplex LC receptacle. * Digital Diagnostic

The relationship between wavelength and transmission

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

1.25Gb/s SFP 1550nm 160km Optical Transceiver

The optical output can be disabled by a TTL logic high-level input of Tx Disable, and the system also can disable the module via I2C. Tx Fault is provided to indicate that degradation of the laser.

Wavelength and Transmission Distance of Optical

Under 1550nm wavelength, 100Mbps and 1Gbps optical transceiver modules can transmit up to 160km, and 10Gbps optical transceiver modules can transmit up to

SFP 100M-L160D CWDM 160km 37dB LC

The optical performance provides a bridgeable distance of up to 160 km depending on the actual optical path attenuation. Note that the lower wavelengths have a higher attenuation on standard SM fiber.

SFP Single Fiber 160 km transceiver | Cisco Compatible 1G ZX Ethernet

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Cisco Compatible single strand bidirectional SFP transceiver Details: This advanced 34dB transceiver is designed for highly reliable fiber optic network links up to 160 km.

What is difference between 1310nm and 1550nm?

Blue is the 1310nm module, yellow is the 1550nm module and purple is the 1490nm module. And the color of compatible fiber optic patch cord is yellow. While the

SFP Single Fiber 160 km transceiver | 1G ZX Ethernet

The module is designed to strictly comply with well known SFP specifications developed by the SFF committee. This module is RoHS compliant and lead-free. OptoSpan 1Gb Single Fiber optical

Calculate the Maximum Attenuation for Optical Fiber Links

Introduction This document describes how to calculate the maximum attenuation for an optical fiber. You can apply this methodology to all types of optical fibers in order to estimate the maximum distance

SFP Single Fiber 160 km transceiver | Cisco Compatible 1G ZX Ethernet

PSFP-11DB57K160 160 km Single Fiber SFP Platinum transceiver for 1G ZX Ethernet. Cisco Compatible single strand bidirectional SFP transceiver Details: This advanced 34dB transceiver is

1G DWDM SFP 160km Transceiver

DWDM SFP Channel 17 (1563.86nm) transceiver for Gigabit Ethernet networks. Supports 1.25Gbps over 160km SMF with 36dB budget. ITU 100GHz C-band compliant.

Fiber Optic Attenuation Calculator | Fiberopticx

1. Attenuation Coefficient (dB/km): This value represents the inherent signal loss per kilometer of fiber optic cable. It depends on the cable type (e.g., multi-mode, single-mode) and the wavelength of light

How Far Can 1550nm Transceivers Transmit Over Single-Mode Fiber?

Introduction When designing fiber-optic networks, knowing how far a 1550nm transceiver can transmit is essential. This wavelength offers low attenuation, making it ideal for metro and long

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