

1310 Single-Mode Optical Module



AI Overview

A 1310nm single-mode optical module is a fiber optic transceiver designed for medium-distance data transmission over single-mode fiber, supporting data rates from 1.25Gbps to 10Gbps with LC duplex connectors.

Key Specifications

- Wavelength:** 1310nm, part of the O-band (1260–1360nm), which minimizes chromatic dispersion and ensures stable medium-distance transmission.
- Fiber Type:** Single-mode fiber (SMF), optimized for longer distances compared to multimode fiber.
- Data Rates:** Modules are available in 1.25Gbps (SFP) and 10Gbps (SFP+) variants, suitable for Ethernet, telecom, and data center applications.
- Transmission Distance:** Typically 10km for 10G modules and up to 20km for 1.25G industrial modules, depending on the module and fiber quality.
- Connector Type:** LC duplex connectors are standard, providing reliable duplex communication.
- Form Factor:** SFP or SFP+ for hot-pluggable installation in switches, routers, servers, and NICs.
- Standards Compliance:** IEEE 802.3ae (10GBASE-LR), SFF-8431, SFP+ MSA, RoHS, and IEC-60825 laser safety standards.

Applications

- Data Centers:** High-speed interconnection between servers, switches, and storage devices.
- Campus Networks:** Reliable medium-distance links across buildings or university campuses.
- Metropolitan Area Networks (MANs):** Efficient transmission for city networks and enterprise backbones.
- Industrial Use:** Some 1.25G modules are designed for industrial environments with strong ESD protection and low EMI.

Advantages

- Low Signal Loss and Minimal Distortion:** Ensures stable and efficient data transmission over medium distances.
- Hot-Pluggable:** Easy installation and replacement without network downtime.
- Low Latency and Power Consumption:** Critical for high-frequency trading, real-time data processing, and cloud applications.
- Cost-Effective:** Balances performance, reach, and affordability compared to 850nm short-reach or 1550nm long-haul modules.

Considerations for Selection

- Transmission Distance:** Ensure the module supports the required link length...

Article Content

OVTSC SFP Optical Module 1.25G Tx1310/Rx1550nm Single Fiber Single Mode ...

Extended Transmission Range: Supports an impressive communication distance up to 10km over a single-mode fiber optical module setup perfectly. Dual Wavelength Efficiency: Operates precision

10G CWDM Single-Mode Optical Module

SFP+ transceiver for CWDM that supports 10G connections up to 20 km using single-mode fiber with a duplex LC UPC connector.

Network Transceiver Modules

Buy Network Transceiver Modules from top brands like C2G, Black Box, Facilis and HPE Aruba Networking. Go to B& H for amazing prices and service.

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.

SFP+ 10G 1310nm Singlemode Optical Transceiver

8. Digital Diagnostics / Digital Optical Monitoring The transceiver provides serial ID memory contents and diagnostic information about the present operating conditions by the 2-wire serial interface (SCL,

Cisco 10GBASE SFP+ Modules Data Sheet

When shorter distances of single-mode fiber are used (<40km), an inline optical attenuator must be used to avoid overloading and damaging the

optical transceiver sfp+ 10g single mode module 1310nm 10km lc

The 1310nm LC Interface 10G Singlemode Dual-fiber Optical Module is the workhorse of the modern network. It combines speed, distance, and reliability into a compact package.

OREI 1G SFP Single-Mode Optical Module (1000BASE-EX, 1310nm,

Built using the industry-standard SFP (Small Form-factor Pluggable) design, this module enables stable Gigabit Ethernet transmission over single-mode fiber at a wavelength of 1310nm, supporting

Singlemode 1310 nm Fiber Optic Transceivers - Mouser

Singlemode 1310 nm Fiber Optic Transceivers are available at Mouser Electronics. Mouser offers inventory, pricing, & datasheets for Singlemode 1310 nm Fiber Optic Transceivers.

Catalog :: AV Distribution & Switching :: Extenders :: Fiber Optic ...

SFP1-SM-D is a fiber optic transceiver using 1310nm single-mode signals. These standard pluggable SFP optical modules have two LC connectors for reception and transmission over two strands of

Optical Transceiver SFP+ 10G Single-Mode Module 1310nm 10km LC

Explore the features, applications, and selection guide for optical transceiver SFP+ 10G single-mode 1310nm 10km LC modules for data centers and enterprise networks.

SFP Transceiver CBO SFP-1G-LH 1G 1310nm | AiO.lv

CBO SFP-1G-LH is a 1 Gigabit SFP transceiver module designed for single-mode fiber links at a wavelength of 1310 nm. The module provides a compact, hot-pluggable interface compatible with

155m Sfp Transceiver 1310nm Single Mode Dual Fiber Lc Ddm 20km

Type Fiber Optic Transceivers Connector Type LC Use FTTH FTTxFTTB Network Network Wired LAN, 5g Model Number F6610M Brand Name Hanwey Place of Origin Guangdong, China Warranty Time 1

Arista Optics Modules and Cables

SFP+ Optical interoperability with 10GbE XFP, X2 and XENPAK pluggable form factors QSFP+ Universal transceiver for 40G operations over duplex multi-mode and single-mode fiber.

Ubiquiti SFP+ Module UACC-OM-SFP10-1310 - Logics Technology

Supports optical fiber cable for durable performance, minimal signal loss, and fast data transfers to greater distances For transmitting data at gigabit speed over hundreds of miles with little integrity

Cisco 10GBASE SFP+ Modules Data Sheet

Product overview The Cisco® 10GBASE SFP+ modules (Figure 1) give you a wide variety of 10 Gigabit Ethernet connectivity options for data center, enterprise wiring closet, and service provider transport

OSP-SM10 Optical SM 1310nm 10G SFP+ Transceiver

OSP-SM10 is a fiber optic transceiver for 1310nm single-mode signals. This standard pluggable SFP+ module has two LC connectors for reception and

Small Form-factor Pluggable

Small Form-factor Pluggable Small Form-factor Pluggable connected to a pair of fiber-optic cables Small Form-factor Pluggable (SFP) is a compact, hot

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

XG-SFP-LR-SM1310 10GBASE-LR SFP+ 1310-nm 10-km DOM

The XG-SFP-LR-SM1310 is aligned to IEEE 10GBASE-LR optical specifications and supports a link length of up to 10 kilometers over a single-mode fiber (SMF) with an LC connector.

10GE SFP+ Optical Modules

CloudEngine 12800 and 12800E Series Switches Hardware Description This document provides an overall description of the CE12800 series switches hardware, helping you obtain detailed information

Single-Mode vs Multimode Fiber and 1300nm/1310nm SFP

Learn the differences between single-mode (SMF) and multimode fiber (MMF), understand 1300nm vs 1310nm SFP transceivers, and discover practical deployment scenarios for enterprise and data

Product Spec Sheet CCH-RM12-A9-P03RH

CCH-RM12-A9-P03RH Corning closet connector housing (CCH) pigtail modules accommodate all industry-standard connector adapter types including the LC, ST® compatible, SC,

Contact Us

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