Gigabit Single-Mode Single-Fiber Transmitter

Overview

1 Gigabit Singlemode SFP Fiber Optic TransceiversOur 1 Gigabit Singlemode SFP Transceivers offer high-performance, reliable connectivity for singlemode 1G.

Key Takeaways

A Gigabit Single-Mode Single-Fiber Transmitter is a 1G SFP module designed for long-distance data transmission over a single strand of single-mode fiber, supporting distances from 2 km up to 120 km depending on the model and wavelength.Key Features

© 2026 ALFA PRO COMMUNICATION SYSTEMS (Pty) Ltd - All rights reserved

Data Rate and Compatibility: These transceivers typically support 1.25 Gbps, making them suitable for Gigabit Ethernet, 1G Fiber Channel, and SDH networks. They are compatible with a wide range of networking devices, including switches, routers, and NICs from vendors like Cisco . Single-Fiber Operation: Single-fiber (BiDi) SFPs use wavelength-division multiplexing to transmit and receive data over a single strand of fiber. This reduces cabling requirements and simplifies network deployment . Transmission Distance: Depending on the model and wavelength, these modules can achieve distances from 2 km to 120 km. For example, standard 1310 nm SFPs typically cover up to 10 km, while higher-end models operating at 1550 nm can reach up to 40 km or more . Connector Type: Most single-mode SFPs use LC connectors, available in simplex or duplex configurations, allowing easy integration into existing fiber infrastructure . Hot-Pluggable and Monitoring: These modules are hot-swappable, enabling installation or replacement without powering down the network device. Many models also support Digital Optical Monitoring (DOM), providing real-time monitoring of optical power, temperature, and voltage . Applications: Ideal for long-distance Gigabit Ethernet links, FTTx deployments, industrial networks, and data center interconnects, these transceivers provide reliable, high-speed connectivity while minimizing fiber usage .

Summary

A Gigabit Single-Mode Single-Fiber Transmitter is a versatile, high-performance SFP module that enables efficient, long-distance data transmission over a single strand of single-mode fiber. Its combination of 1G speed, long reach, LC connectivity, and hot-pluggable design makes it suitable for professional networking environments, including enterprise, industrial, and telecom applications .

Article Content

1 Gigabit Singlemode SFP Fiber Optic Transceivers

Our 1 Gigabit Singlemode SFP Transceivers offer high-performance, reliable connectivity for singlemode

1G BiDi SFP

GIGALIGHT''s 1G BiDi SFP series optical transceiver modules support a speed of 1.25Gbps, widely used in

Cisco SFP Modules for Gigabit Ethernet Applications

This data sheet describes the benefits, specifications, and ordering information for the

SFP Transceiver

© 2026 ALFA PRO COMMUNICATION SYSTEMS (Pty) Ltd - All rights reserved

Utilizing LC connectors and operating at a 1310nm wavelength, it enables high-speed data transmission over single-mode fiber for

1G SFP LX 1310nm 20km Single mode Transceiver

Generic SFP-1G-LX Compatible 1000BASE-LX/LH SFP 1310nm 10km-20km Transceiver supports 1G

1000 Mbps (1 Gbps) | Single Mode Fiber | LC | 20 km

Cisco GLC-LH-SMD Compatible SFP Module - 1000BASE-LH - 1GbE Single Mode Fiber SMF Optic

Cisco SFP Modules for Gigabit Ethernet Applications Data Sheet

This data sheet describes the benefits, specifications, and ordering information for the Cisco SFP Modules for Gigabit

Cisco Transceiver Modules

Cisco Transceiver Modules - Learn product details such as features and benefits, as well as hardware and software specifications.

SFP-GE-CS-SM 1.25Gbps 1310nm Single-mode Simplex SC fiber

1.25Gbps 1310nm Single-mode Simplex SC fiber SFP Transceiver Compliant with SFF-8472 and DDM Function Small Form Factor

Gigabit SFP Module: A Complete Guide to 1G SFP

Depending on the specific SFP type, the module may transmit data over multimode fiber, single-mode

TechLogix Networx 1G Single-Mode SFP Transceiver Module

Designed for single-mode fiber and operating at wavelengths of 1310nm, the 1G Single-Mode SFP Transceiver Module from

Gigabit Multimode to Single Mode Media Converter Modules | Perle

Installed in a high density Perle Media Converter Chassis, Perle''s feature rich C-1000MM Gigabit Fiber to Fiber Media Converter

1.25G Single-Mode/10KM Fiber SFP Module

The 2A-137G 1.25G Single-Mode/10KM Fiber SFP Module provides 1 GbE connectivity up to 10 kilometers. The transceiver can be

Gigabit Fiber Media Converter | Multimode to Single Mode | Perle

© 2026 ALFA PRO COMMUNICATION SYSTEMS (Pty) Ltd - All rights reserved

Multimode to Single Mode or Multimode to Multimode Transparently convert Single Mode to Multimode, or extend the distance of a

Cisco Gigabit Ethernet GBIC/SFP Modules

Cisco offers a range of GBIC transceivers and Small Form-factor Pluggables (SFP) transceivers for Gigabit Ethernet and Fibre

ipolex Gigabit Single-Mode LC Fiber to Ethernet Media

About this item Seamless Conversion of LC Fiber to Copper – This fiber optic to ethernet media converter

1G SFP LX 1310nm 20km Single mode Transceiver

Generic SFP-1G-LX Compatible 1000BASE-LX/LH SFP 1310nm 10km-20km Transceiver supports 1G

1000 Mbps (1 Gbps) | Single Mode Fiber | LC | 20 km

Cisco GLC-LH-SMD Compatible SFP Module - 1000BASE-LH - 1GbE Single Mode Fiber SMF Optic

Cisco SFP Modules for Gigabit Ethernet Applications Data Sheet

This data sheet describes the benefits, specifications, and ordering information for the Cisco SFP Modules for Gigabit

Cisco Transceiver Modules

Cisco Transceiver Modules - Learn product details such as features and benefits, as well as hardware and software specifications.

SFP-GE-CS-SM 1.25Gbps 1310nm Single-mode Simplex SC fiber

1.25Gbps 1310nm Single-mode Simplex SC fiber SFP Transceiver Compliant with SFF-8472 and DDM Function Small Form Factor

Gigabit SFP Module: A Complete Guide to 1G SFP

Depending on the specific SFP type, the module may transmit data over multimode fiber, single-mode

Gigabit SFP Modules | Fiber SFP | Copper SFP | Antaira

Gigabit SFP Modules Antaira offers a wide range of Gigabit SFP modules for fiber and copper connections including multi-mode and

Two Types of Fiber Media Converters | FiberMall

© 2026 ALFA PRO COMMUNICATION SYSTEMS (Pty) Ltd - All rights reserved

Only single-fiber media converters (one fiber is required for normal communication) will have a transmitter and a

Industrial Gigabit Fiber SFP Optical Transceiver Module, Single-Mode

Also known as a mini-Gigabit Interface Converter (GBIC), this industrial SFP module''s metal housing offers increased durability while

DAHUA Gigabit Optical Module Fiber Transceiver LC/LC Single Mode

Gigabit Optical Module > Single mode double fiber > LC port > 1310nm sending, and 1310nm receiving > Transmission distance up

TechLogix Networx 1G Single-Mode SFP Transceiver Module

Designed for single-mode fiber and operating at wavelengths of 1310nm, the 1G Single-Mode SFP Transceiver Module from

Gigabit Multimode to Single Mode Media Converter Modules | Perle

Installed in a high density Perle Media Converter Chassis, Perle''s feature rich C-1000MM Gigabit Fiber to Fiber Media Converter

1.25G Single-Mode/10KM Fiber SFP Module

The 2A-137G 1.25G Single-Mode/10KM Fiber SFP Module provides 1 GbE connectivity up to 10 kilometers. The transceiver can be

Gigabit Fiber Media Converter | Multimode to Single Mode | Perle

Multimode to Single Mode or Multimode to Multimode Transparently convert Single Mode to Multimode, or extend the distance of a

1 Gigabit Singlemode SFP Fiber Optic Transceivers

Our 1 Gigabit Singlemode SFP Transceivers offer high-performance, reliable connectivity for singlemode

1G BiDi SFP

GIGALIGHT''s 1G BiDi SFP series optical transceiver modules support a speed of 1.25Gbps, widely used in

Cisco SFP Modules for Gigabit Ethernet Applications

This data sheet describes the benefits, specifications, and ordering information for the

SFP Transceiver

© 2026 ALFA PRO COMMUNICATION SYSTEMS (Pty) Ltd - All rights reserved

Utilizing LC connectors and operating at a 1310nm wavelength, it enables high-speed data transmission over single-mode fiber for

Gigabit SFP Module: A Complete Guide to 1G SFP

Learn what a gigabit SFP module is, how it works, main types, key specifications, and common use cases

1G 1310nm 40km SFP EX Transceiver Module

Featuring a built-in Semtec chip and reliable DFB laser / PIN receiver, the SFP module delivers low power

Fiber Optic Transceiver SFP Gigabit Ethernet, 10 km

The L-com FXC-SFP1G-31-10 is an SFP form-factor transceiver, supporting Gigabit Ethernet data rates.

Cisco SFP Modules for Gigabit Ethernet Applications

The 1000BASE-ZX SFP operates on standard single-mode fiber-optic link spans of up to approximately 70 km in length. The SFP

1G SFP LX 1310nm 20km Single mode Transceiver

Featuring a built-in Semtec chip and reliable FP laser / PIN receiver, the SFP module delivers low power

SFP Transceiver

The 1000BASELX SM SFP 10KM is a Gigabit single-mode SFP (mini-GBIC) transceiver with an LC style

1 Gigabit Singlemode SFP Fiber Optic Transceivers

Our 1 Gigabit Singlemode SFP Transceivers offer high-performance, reliable connectivity for singlemode

1G BiDi SFP

GIGALIGHT''s 1G BiDi SFP series optical transceiver modules support a speed of 1.25Gbps, widely used in

Cisco SFP Modules for Gigabit Ethernet Applications

This data sheet describes the benefits, specifications, and ordering information for the

SFP Transceiver

© 2026 ALFA PRO COMMUNICATION SYSTEMS (Pty) Ltd - All rights reserved

Utilizing LC connectors and operating at a 1310nm wavelength, it enables high-speed data transmission over single-mode fiber for

Related Video Reference

This video was associated with the source search result. Verify technical details against current product documentation and project requirements.

Contact Us

Continue your research online:

Website: https://alfa-pro.co.za
Technical inquiry: https://alfa-pro.co.za/contact.html

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

© 2026 ALFA PRO COMMUNICATION SYSTEMS (Pty) Ltd - All rights reserved