Optical module SFF manufacturers



Overview

Compact SFF Optical Modules: Reliability, Density & Efficiency for. Discover how soldered SFF (Small Form-Factor) optical modules deliver high reliabilit.

Key Takeaways

Leading manufacturers of SFF optical modules include LINK-PP, Chengdu Gigac Technology, and Amphenol, offering compact, reliable, and high-performance transceivers for embedded and industrial networking applications. Key Manufacturers and OfferingsLINK-PP specializes in soldered SFF optical modules designed for permanent integration onto PCBs. Their products, such as the LF5-SC3501-40IDL and LF5-SM3101-10AI, support bidirectional single-fiber links and 1G Ethernet over single-mode fiber, providing low-latency, high-reliability performance for FTTH deployments, industrial automation, and embedded network hardware.

LINK-PP modules are ISO-certified, RoHS-compliant, and Telcordia-tested, emphasizing long-term durability and thermal stability. Chengdu Gigac Technology offers the SFF 2x5 series, which includes single-fiber (SC interface) and dual-fiber (LC interface) transceivers. These modules support speeds from 155Mbps to 2.

5Gbps and transmission distances from 300m to 160km, with military-grade and extended-grade options for harsh environments. They feature low EMI, excellent ESD protection, and operate from a single 3. 3V supply.

Amphenol provides a broad range of SFF optical transceivers, including SFP, SFP+, XFP, and QSFP28 modules. Their products support duplex, BiDi, CWDM, and DWDM applications, with LC or MPO interfaces. Amphenol modules are widely used in data centers, telecom, and high-speed networking, offering low power consumption, high reliability, and compliance with IEEE and MSA standards.

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Applications and AdvantagesSFF optical modules are ideal for embedded systems, industrial Ethernet, telecom access layers, and data center interconnects. Their soldered design ensures mechanical stability, thermal efficiency, and reduced failure rates compared to pluggable modules. They support multiple communication standards, including Ethernet, SONET/SDH, ATM, and Fibre Channel, enabling broad interoperability.

Summary

For sourcing SFF optical modules, LINK-PP, Chengdu Gigac Technology, and Amphenol are prominent manufacturers offering a range of compact, high-performance, and industrial-grade transceivers. Selection depends on required interface type (SC, LC), data rate, transmission distance, and environmental tolerance, making these manufacturers suitable for both embedded and high-density networking applications.

Frequently Asked Questions

What does an optical transceiver do?

Optical modules are mainly packaged by optoelectronic devices TOSA/ROSA, functional circuits and optoelectronic interface components. The optical t...

What is the optical module industry chain?

The upstream industry of optical modules mainly includes optical chips, optical components and optical devices, and the downstream industry mainly...

Who are the main manufacturers and suppliers in the optical module industry chain?

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Article Content

Compact SFF Optical Modules: Reliability, Density & Efficiency for ...

Discover how soldered SFF (Small Form-Factor) optical modules deliver high reliability, dense port integration and cost-efficient connectivity for OEMs in industrial, telecom and embedded

10 companies in the optical transceiver industry chain 2024

To help you choose the best partner, this article will analyze and introduce 10 companies in the optical transceiver industry chain for you.

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Optical Transceiver Market: Top 10 Manufacturers Ranked

Optical transceiver market leaders: the top 10 manufacturers powering 400G and 800G modules for hyperscale data centers and AI networking.

Mini-SFF Optical Transceiver-Optical Transceiver-Gigac Technology

We specialize in producing a wide range of optical transceivers, including SFP, SFF, Mini-SFF, LCC, and Parallel Optical Modules, as well as OLT and ONU solutions.

Optical Transceivers | Coherent

Get the pluggable module performance you need from the manufacturer of choice for all major networking equipment vendors worldwide.

Gigac Technology

Gigac is a leading manufacturer of fiber optic communication components and GPON equipment. We specialize in producing a wide range of optical transceivers, including SFP, SFF, Mini-SFF, LCC, and

SFF Transceivers

Fiberinthebox small form-factor (SFF) is a compact optical transceiver used in optical communications for both telecommunication and data communications applications. It is a popular industry format

1.25G Multi-Mode SFF_SFF_Optical

The FT4-M3 series Multi-mode optical transceiver is a 2 x 5 Small Form Factor (SFF) with LC connector. This Multi-Mode transceiver is low power, high

Optical Module MCUs Become Critical as AI Data Centers Drive

MCU chips for optical modules emerge as a critical semiconductor segment as AI data center buildout drives 800G/1.6T demand, with domestic players GigaDevice and Nations

Understanding Optical Modules: Working Principles, Structures, and ...

Explore the working principles, structures, and performance metrics of optical modules, essential components of optical fiber communication systems. Learn about key indicators such as

2.5g SFP Single-Mode Optical Transceiver Suppliers,manufacturers ...

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Optical Module Procurement Guide

Optical Module Procurement guide to pricing trends, OEM vs aftermarket insights, and strategic buying tactics to optimize costs, reliability, and total ownership.

SFP Optical Modules: The Essential Bridge in Modern Communication

SFP optical modules are essential components in cutting-edge network infrastructure, enabling high-speed, reliable fiber optic communication.

SFP Optical Transceiver

Find here SFP Optical Transceiver, SFP Transceiver manufacturers, suppliers & exporters in India. Get contact details & address of companies

10G CSFP+ EEPROM Standards and Edge Connector Protocol

Learn how 10G CSFP+ EEPROM standards, SFF-8472 memory mapping, I²C management, and edge connector protocols ensure compatibility, digital diagnostics (DDM/DOM), and reliable

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Optical Module Market Analysis and Forecast in 2026

AI computing power has driven explosive growth in the optical module market, with 800G and 1.6T technologies leading the industry transformation.

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