

ODM Active Optical Devices SFP



Overview

Custom active optical cables excel in data centers, HPC clusters, SAN/storage networks, and telecom/5G fronthaul.

Key Takeaways

ODM SFP modules are pre-designed, high-quality optical transceivers that can be branded and deployed quickly for data center, enterprise, and telecom applications.

Overview of ODM SFP Modules

Small Form-factor Pluggable (SFP) modules are hot-swappable optical transceivers used to connect network devices over fiber optic cables.

OD

M (Original Design Manufacturer) SFPs are pre-engineered solutions that allow businesses to brand and deploy optical modules without investing in full R&D, reducing time-to-market and development costs. These modules support various data rates, typically from 1.25G to 10G, and can be used in Gigabit Ethernet, SAN, and telecom networks.

Key Features

Compatibility: ODM SFPs are often Cisco-compatible or compatible with other major switch and router brands, ensuring seamless integration. **Transmission Distance:** Single-mode SFPs can reach up to 10 km using 1310nm-TX/1550nm-RX wavelengths, while multi-mode SFPs typically support shorter distances, such as 850m over MMF.

Hot-

Swappable: These modules can be inserted or removed without powering down the network device, enabling flexible maintenance and upgrades. **Low Power Consumption:** Designed for energy efficiency, making them suitable for large-scale deployments in data centers. **Testing and Quality Assurance:** ODM SFPs undergo rigorous testing for interoperability with switches, routers, and servers, ensuring reliable performance.

Applications

Data Centers: High-speed connectivity for servers, storage, and network switches.

Enterprise Networks: LAN and SAN connectivity for offices and campus networks.

Telecom Networks: Long-distance fiber links for ISPs and telecom providers.

Cloud and 5G Networks: Supporting high-bandwidth, low-latency connections for modern communication infrastructures.

OE

M vs ODM for SFP Modules
OEM (Original Equipment Manufacturer): You provide the design and specifications, and the manufacturer produces the SFP modules according to your exact requirements, preserving your intellectual property.

OD

M (Original Design Manufacturer): The manufacturer provides ready-made, tested SFP designs that you can brand as your own, ideal for faster deployment and lower R&D costs.

Sourcing and Customization

Companies like Yoranco, Fibconet, Unitek Fiber, and FiberMall offer ODM SFP services, providing a range of modules including SFP+, SFP28, QSFP+, and CWDM/DWDM transceivers. They also support active optical cables (AOC), direct attach copper (DAC), and media converters, allowing end-to-end optical connectivity solutions. Small orders can often be shipped within 2-3 days, making ODM SFPs suitable for rapid deployment projects.

In summary, ODM SFP modules provide a cost-effective, reliable, and fast solution for businesses needing high-performance optical connectivity without the overhead of full product development, while maintaining flexibility for branding and network integration.

Article Content

Active Optical Cables_AOC_SFP QSFP QSFP-DD

USource is leading manufacturer OEM ODM Carrier-Grade of high speed Active Optical Cables in SFP QSFP QSFP-DD form facto, which supports data speed of Wanbao OEM/ODM 10G SFP+ FTTH Active Optical Cable (AOC) for

Key attributes Model Number 10G SFP+ FTTH Active Optical Cable (AOC) Type Fiber Optic Cable Brand Name Wanbao/OEM Place of Origin Shanghai, China

SFP, QSFP, QSFP-DD, OSFP Active Optical Cable Assemblies

Our active optical cable assembly portfolio provides improved cable flexibility and longer reach as compared to both traditional passive copper and emerging active copper (ACC/AEC) solutions,

Custom Active Optical Cable (AOC)-FibreCross

Custom active optical cables excel in data centers, HPC clusters, SAN/storage networks, and telecom/5G fronthaul. Their low-latency, high-bandwidth links are especially valuable for high

Optical Traceive_Fiber Modules_SFP XFP QSFP | USource 17 yea

USource are committed to provide OEM ODM of high-performance Carrier-Grade optical traceive in SFP XFP QSFP QSFP-DD form facto with data speed of 1.25G 10G 25G 40G 56G 100G 200G 400G.

ODM SFP+ AOC Manufacturers, Factories

Their SFP+ AOC solutions are designed for performance and durability, making them an ideal choice for factories and enterprises looking to enhance their network infrastructure. With a range of options

SFP Optical Module Specifications: Standards & Performance

This guide dives into the key SFP Optical Module Specifications that engineers, network architects, and procurement professionals rely on when evaluating optical transceivers.

10G SFP+ AOC Cable 10M | FiberMania ODM/OEM

FiberMania provides full OEM and ODM services for 10G SFP+ Active Optical Cables. Custom options include cable length adjustments, private labeling on

OEM & ODM fiber SFP Modules | Custom Optical Transceiver

Discover professional OEM & ODM services for fiber SFP Modules. From customized optical transceiver design to ready-made rebranding solutions, we deliver high-quality, certified, and

Ultimate Guide to 10G SFP+ AOC Cables 2025

Ultimate Guide to 10G SFP+ AOC Cables: Reliable, Scalable, and Cost-Effective As data center and enterprise network demands continue to grow, 10G SFP+ AOC

Hilink Optics QSFP QSFPDD OSFP 10G SFP transceiver, Optical

If you have any questions about Hilink Optics CWDM DWDM QSFP QSFPDD OSFP 10G SFP transceivers, we will give the professional solutions to you.

Active Optical Cables_AOC_SFP QSFP QSFP-DD | USource 17 yea-Optical ...

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Active Optical Cable (AOC)

10Gtek® QSFP28 active optical cables (AOC) are high-performance active optical cables with bi-directional signal transmission and aggregate 100-Gbps bandwidth for both InfiniBand EDR and

SFP, QSFP, QSFP-DD, OSFP Active Optical Cable Assemblies

SFP, QSFP, QSFP-DD, OSFP ACTIVE OPTICAL CABLE ASSEMBLIES Our active optical cable assembly portfolio provides improved cable flexibility and longer reach as compared to both

10G SFP+ Active Optical Cables | Optical Interconnect | Amphenol

Amphenol's 10G SFP+ optical modules include SFP+ AOC. They are compliant with SFP+ MSA, SFF-8431 and SFF-8472, and are mainly used in Telecom, Wireless, InfiniBand, and

Optical Transceivers_Fiber Optic

USource have deeply cultivated in the optical communication industry since its foundation in 2006 year and committed to manufacture fiber optic devices and

AOC, DAC, Fiber Optic Transceivers | One-Stop Shop for Datacenter

Online shopping. w/24h-delivery, 7Days & Refund Guarantee. CE, RoHS and ISO9001 Certified. SFP+ Cables, QSFP+ Cables, MiniSAS Cables, XFP Cables, CX4 Cables and Fiber Optic Transceivers.

Is the SFP optical module passive or active?

These devices require the action of an external signal to produce an electrical signal output. What is an active device? Active equipment refers to electronic components with a power supply inside, which

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Technical inquiry: <https://fdsoluciones.es/project-enquiry.html>

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

