

OEM Optical Amplifier OSFP



Article Overview

OSFP (Octal Small Form-Factor Pluggable) modules are high-speed, high-density optical transceivers supporting 400G, 800G, and 1.6T networks, optimized for AI and hyperscale data center deployments.

Overview of OSFP

OSFP is a hot-pluggable, high-bandwidth optical transceiver form factor designed for modern data centers requiring ultra-high-speed connectivity. It supports power budgets up to 60W, enabling better thermal management and airflow compared to QSFP-DD modules, which is critical for GPU-intensive AI clusters and large-scale east-west traffic networks. The native 8-lane architecture allows scaling to higher speeds without changing the mechanical form factor, making it suitable for 400G, 800G, and emerging 1.6T applications.

Technical Specifications

- Speed Classes: 400G, 800G, 1.6T, with support for 200G per lane configurations.
- Optical Designs: Includes DR4, FR4, 2×DR4, 2×FR4, SR8, and DR8 transceivers for short- and long-range applications.
- Connectivity: Supports LC or MPO ports, breakout modes, and interoperability with QSFP-DD, QSFP56, QSFP28, and SFP+ form factors.
- Standards Compliance: Fully compliant with OSFP MSA, IEEE 802.3, and OIF-CMIS standards, and RoHS directives.
- Thermal and Electrical Performance: Designed for high thermal capacity and electrical scalability, ensuring stable operation under heavy load and high-density d...

Article Content

Cisco Transceiver Modules

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

OSFP OCTAL SMALL FORM FACTOR PLUGGABLE MODULE

Abstract: This specification defines the electrical connectors, electrical signals and power supplies, mechanical and thermal

Introduction to OSFP Optical Transceiver

The OSFP receptacle does not offer backwards intermate-ability to existing modules since it favors optimizing the electrical,

OSFP Product Family » Acacia

Octal Small Form-factor Pluggable (OSFP) solution that fits into high-density switch and router client ports for optical interconnect links

OSFP Transceivers: High-Density Optical Connectivity from 400G to

As hyperscale data centers shift toward AI-optimized fabrics and ultra-high-bandwidth switching platforms, the OSFP

400ZR DCI Solution

Apart from the form factor and optical connectors, the functionality of the OSFP-AMP-ZR and QSFP-AMP-ZR are identical: The

Arista Optics Modules and Cables

To accommodate an increasing spectrum of applications, Arista offers a wide choice of OSFP, QSFP-DD, QSFP, SFP, SFP-DD and

OSFP1600_and_OSFP-XD

OSFP-XD can also support 8-lane optics modules that want to take advantage of thermal management capabilities and useable

Optical Amplifier Solutions | DPSS, EDFA, SOA | RPMC Lasers

Shop our collection of Optical Amplifiers: DPSS, Fiber (EDFA), SOA: IR 1, 1.3, 1.5 & 2µm. OPA with 210-10,000nm tunable

Understanding the Flat-Top OSFP Optical Transceiver: Compatibility ...

Explore the OSFP Flat Top Optical Transceiver's compatibility with 800G modules, direct attach cables, and its

Small Form-factor Pluggable

An even larger sibling, the Octal Small Format Pluggable (OSFP), had products released in 2022 capable of 800 Gbit/s links

OptiModule — High-Performance Optical Transceivers 10G to 800G ...

OptiModule by eSeeSky Inc. — Enterprise optical transceivers from 10G to 800G. SFP+, QSFP28, QSFP-DD, OSFP. MSA

OSFP Transceivers: High-Density Optical Connectivity from 400G to

Designed for high thermal capacity, electrical scalability, and forward compatibility, OSFP modules now drive

OSFP (Octal Small Form Factor Pluggable) Copper Cable Assemblies

Our Electronics Products "Product of the Year" award-winning OSFP (Octal Small Form Factor Pluggable) cable assemblies are

Understanding the OSFP Standard: The Open 400G/800G Optical

Introduction: The Shift from QSFP-DD to OSFP As data centers transition from 400G to 800G interconnects,

1.6T OSFP Transceivers | Optical Transceivers | Amphenol

Amphenol's 1.6T OSFP transceiver delivers 200G per lane to support advanced 800G and 1.6T Ethernet applications,

20 Optical Amplifier Manufacturers in 2026

20 Optical Amplifier Manufacturers in 2026 This section provides an overview for optical amplifiers as well as their applications and

OSFP MSA targets 400-Gbps optical transceiver module

The OSFP MSA will seek to develop specifications for an optical transceiver capable of supporting transmission rates up to 400

OEM Optic, Inc

Our mission is to provide customers the lowest pricing, best service and highest quality optical transceivers in the global market.

Semiconductor Optical Amplifiers – Buyer's Guide & Suppliers

This buyer's guide for semiconductor optical amplifiers provides technical background, comparison of major types, selection criteria,

Custom 400G Optical Transceivers Module | OEM/ODM Service

Whether you need QSFP-DD, OSFP or QSFP112 form-factors, our turnkey OEM/ODM services ensure seamless integration and

Charting the Path Toward 1.6T and 3.2T Optical Module Solutions

Figure 9 depicts the implementation of a 1.6T optical module in an OSFP platform using Intel's PICs and integrated electronic

Optical Amplifiers

An Optical Amplifier is a device that amplifies optical signals traveling through a fiber optic cable. Optical Amplifiers from the leading

Optical Amplifier Module

50Gbps QSFP28 BIDI Optical Module 100Gbps QSFP28 Optical Module 400Gbps QSFP-DD Optical Module Optical Amplifier

Data Center Transceivers & Cables

Arista's transceivers and cables offer customers a wide variety of connectivity options over copper or fiber for data center and HPC

OSFP vs. OSFP-XD: 1.6T Transceivers Form Factor Comparison

The OSFP-XD is primarily designed with several key objectives: high-power compatibility, copper cable support, and

Understanding OSFP Modules: Your Guide to High-Speed Optical ...

Discover how OSFP modules provide high-speed optical connectivity for data center applications. Learn about the

Optical Amplifiers – Buyer's Guide & Supplier List | RP Photonics

This buyer's guide for optical amplifiers provides technical background, comparison of major types, selection criteria, and an

400G and 800G OSFP transceivers | Smartoptics

Compared to QSFP-DD, OSFP offers enhanced thermal management, making it well-suited for power-intensive applications

OSFP Cable Assemblies | High Speed Input Output | Amphenol

Amphenol leading the industry in OSFP cable development. Our Electronics Products Product of the Year award-

400ZR DCI Solution

The OSFP-AMP-ZR and QSFP-AMP-ZR pictured below each contain two Erbium Doped Fiber Amplifiers (EDFAs): A boost amplifier

OEM SFP Modules Explained: Compatibility, Cost and Use Cases

Understand OEM SFP modules, pricing, compatibility, lifespan, and differences vs third-party optics. Learn what

Welcome to OSFPmsa

A: The OSFP is a pluggable form factor with 8x high speed electrical lanes that support up to 400 Gbps

Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: <https://www.watermanfinance.co.za>

Email: sales@watermanfinance.co.za

Phone: +49-176-8294713

Address: Neue Mainzer Str. 66-68, 60311 Frankfurt am Main, Germany

This document is for informational purposes only. Specifications subject to change without notice.

