FTTR Class Liquid-Cooled Switch OSFP Selection Guide



Overview

In this article, you will find the complete 2026 cross-vendor reference for OSFP compatible switches, including specific models, OSFP variant requirements (IHS, RHS, XD, twin-port vs single-port), port density, breakout capabilities, and a practical selection . In this article, you will find the complete 2026 cross-vendor reference for OSFP compatible switches, including specific models, OSFP variant requirements (IHS, RHS, XD, twin-port vs single-port), port density, breakout capabilities, and a practical selection . OSFP stands for Octal Small Form-factor Pluggable. It is a high-speed optical transceiver module standard designed to support data transmission rates of 400G, 800G, and upcoming 1. The module uses eight electrical lanes, with each lane operating at 50 to 200 Gbps depending on the. The OSFP (Octal Small Form Factor Pluggable) form factor has emerged as a leading choice for next-generation 800G and 1. 6T optical transceivers, not only because of its electrical and mechanical scalability, but also because it was designed from the outset to support higher power envelopes through. In April 2026, a procurement engineer at a North American hyperscaler placed an order for 800 OSFP transceivers, only to discover three weeks later that the destination switches required the OSFP-RHS variant rather than the standard OSFP-IHS form she had ordered. Three weeks of project delay.

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Article Content

OSFP Flat Top vs Finned Top: How to Choose

Learn the key differences between OSFP flat top and finned top transceivers. Compare thermal design, compatibility, and use cases for 400G/800G networks. Get expert guidance.

OSFP Thermal Form Factors Explained: Finned Top, Closed Top, and

As networks move toward 800G and 1.6T optical transceivers, selecting the appropriate OSFP thermal architecture is essential for achieving long-term performance, reliability, and scalability.

A Comprehensive Guide of the Thermal Design in OSFP Modules

Combining the thermal characteristics of both finned-top and flat-top designs, it is suitable for air-cooled switches, liquid-cooling systems, or environments where dust protection is required.

OSFP Thermal Form Factors Explained: Finned Top, Closed Top

This article explains why multiple OSFP thermal form factors exist, compares the structural differences between OSFP-IHS and OSFP-RHS, and provides guidance on selecting

OSFP Thermal Form Factors Explained: Finned Top, Closed Top, and

As 800G and 1.6T optics increase power density, OSFP thermal design becomes critical. Learn the differences between OSFP-IHS and OSFP-RHS, and how Finned Top, Closed Top, and Flat Top

OSFP Compatible Switches: 2026 Vendor Guide for 400G/800G

Complete OSFP compatible switches guide covering Cisco, Arista, Juniper, NVIDIA. 400G/800G platform compatibility, port density, and selection.

Finned-Top vs Flat-Top OSFP Transceivers Explained

Discover the differences between finned-top and flat-top OSFP optical transceivers. Learn which design suits 400G vs 800G applications and cooling needs.

NVIDIA Spectrum-6 SN6000 Ethernet Switch Systems Hardware User

The SN6600-LD is a fully liquid-cooled switch, featuring 64 RHS type OSFP cages supporting 128 ports of up to 800 Gb/s in a compact 2RU form factor. It provides 102.4 Tb/s of total throughput for scalable

Understanding 400G and 800G OSFP Transceiver: Finned-Top vs.

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Discover the key features of finned-top and flat-top 400G/800G OSFP transceivers and learn how to choose the right one for your network needs.

Understanding Finned-Top, Closed-Top, and Flat-Top Transceivers: A ...

Guide to Finned-Top, Closed-Top, and Flat-Top transceivers for optimal cooling, ensuring reliable performance in networking hardware.

800G OSFP Transceiver: Performance Analysis for AI

Port Density and Switch Capacity Selection Guidelines Power Consumption and Thermal Management Real-World Power Consumption

OSFP Thermal Management: Complete Data Center

Data center teams frequently miscalculate their cooling needs because they focus on switch expenses instead of understanding the thermal

Juniper 800G Optical Transceivers and Cables Guide

It allows transceivers with OSFP form factor to handle higher power dissipation and provide better cooling solutions. Fiber type and reach—The fiber type specifies the type of optical

Industry First 1.6T Liquid Cooled Switch: QFX5250-64OE-L

SWITCH DESCRIPTION The switch has 64 high-speed OSFP ports (ports 0–63) supporting interface speeds up to 1.6TbE, with flexible channelization options to operate at 800GbE,

Liquid Cooling Integration and Logistics White Paper

Liquid cooling using cold plates cooling technologies has been the focus of many technology papers and industry guidelines. It is known that liquid cooling is an efficient and effective cooling fluid for high

Thermal Optimizations for OSFP Optical Transceiver Modules

Heat dissipation and electric shielding techniques and apparatuses are disclosed to enable the operation of OSFP modules at higher bandwidths. OSFP compatible techniques are discussed including the

FTTR Application-Level Core Switch Silicon Photonics Selection Guide

Integrating silicon photonics with complementary metal–oxide Comprehensive early review that organizes modulation mechanisms and trade-offs in silicon, giving newcomers a guide for device

10G SFP+ SR vs LR vs ER vs ZR: Optical Link Architect''s Guide

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Master 10G SFP+ link design. Compare SR, LR, ER, and ZR specifications, optical power budgets, and dispersion limits. Avoid APD burnout and CRC errors with our architect''s field

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EU project coordination: Parque das Nações, Lisbon, Portugal

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

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