

# OEM Liquid-Cooled Switch QSFP-DD



## Overview

The QSFP-DD Series offers up to 400Gbps transmission speeds and features 1-by-4 cages. 4 Tbps aggregate bandwidth in a single switch slot. QSFP-DD is a new module and cage/connector system similar to current QSFP, but with an additional row of contacts providing for an eight lane electrical interface. 8mm pitch and a dual-mating interface. This guide provides a comprehensive overview of QSFP-DD compatible switches across major vendors, explains the fundamentals of backward compatibility at the port level, and outlines how to verify transceiver compatibility before procurement. Customers can upgrade their box in advance of new cables. Quad Small Form-Factor Pluggable Double-Density (QSFP-DD) offers twice as many high-speed electrical interfaces as QSFP28 while maintaining the same port density. When combined with higher transmission rates per electrical interface (28 Gbps to 56 Gbps to 112 Gbps), QSFP-DD optical transceivers can. High performance Coolant Distribution Unit (CDU). Liquid direct cooling for memory DIMMs.

## Article Content

### 400G QSFP-DD Immersible Cooling Extender

This product include extender cage, cable, QSFP-DD housing three parts, the cable length can be customized no more than 0.5m for extension, that can avoid the QSFP-DD pluggable modules boost data density

Each QSFP-DD port provides 76 electrical contacts, which can support next-generation switching chips for higher density applications. The QSFP-DD is

### Liquid Cooling Solutions

Advanced Liquid Cooling Solution – Purpose-built thermal solutions for any cooling budget Professionally designed, built, & tested to meet the most demanding server/storage/data center

### QSFP-DD series

QSFP-DD can enable up to 14.4 Tbps aggregate bandwidth in a single switch slot. QSFP-DD electrical interfaces will employ eight lanes that operate up to 25 Gbps NRZ modulation or 50 Gbps PAM4

### High-Speed Hardware and Immersion Cooling Solutions | FIBERSTAMP

HIGH-SPEED INTERCONNECT HARDWARE AND LIQUID COOLING SOLUTIONS FOR DATA CENTER AND HPC Parallel and WDM DCI Solutions Elevate Data Center Connectivity

### Immersion 400G QSFP-DD SR8 850nm 100m (328ft)

FIBERSTAMP 400G QSFP-DD SR8 liquid-cooled optical module is designed for immersive data center 400GBASE-SR8 Ethernet links. It utilizes 50G PAM4 and

### The Ultimate Guide to QSFP Cage Connectors and

In order to find out where the future lies in this competitive quest for speed of data transmission, it is observed that QSFP (Quad Small Form-factor

### Immersible-400G

GIGALIGHT's 400G QSFP-DD/OSFP liquid cooling optical module is designed for use in submerged data center 400GBASE-SR8 Ethernet links. It adopts 50G

### QSFP-DD Strategies Help Data Centers Keep Cool

QSFP-DD Modules are Flexible and Economical Building and sustaining the pipeline of interoperable interconnect solutions is absolutely critical

### QSFP-DD: Enabling 15 Watt Cooling Solutions

It has been demonstrated that the QSFP-DD module/cage design in both stacked and belly-to-belly configurations can support thermal loads beyond 15W as needed for next generation

QSFP-DD Connectors | High Speed I/O | Amphenol

Amphenol's QSFP-DD interconnect system delivers high-speed performance with exceptional signal integrity. With 76 contacts per port, eight

Immersion-Cooled 800G QSFP-DD SR8 Optical

JTOPTICS® Immersion-Cooled 800G QSFP-DD SR8 Active Optical Cable (AOC) is an advanced high-bandwidth optical interconnect solution engineered specifically

QSFP-DD vs OSFP: Which 400G/800G Form Factor

Compare QSFP-DD and OSFP. Learn about size, compatibility, cooling, density, and use cases. Includes comparison tables, deployment advice,

QSFP-DD Optical Transceivers for High-Speed Connections

QSFP-DD ports incorporate a riding heatsink that can be sized independently of the optical module, added on top of the module, or placed between modules. This flexibility enables switch and routing

NEXT-GEN DATA CENTER INFRASTRUCTURE RAISES THERMAL MANAGEMENT STAKES

An array of high-speed, high-density solutions revolving around various small form-factor pluggable modules, such as SFP, SFP+, QSFP, QSFP+ and zQSFP, gained considerable traction in

QSFP-DD CONNECTORS & CABLE ASSEMBLIES PRODUCT

The QSFP-DD portfolio's backwards compatibility allows existing QSFP modules to be plugged into QSFP-DD ports. Our QSFP-DD cages feature a proprietary heat sink design, making them the only

Immersible Extender

A new standalone product, the Immersion Liquid Cooling Extender, is designed for immersion-cooled data centers. It extends the electrical interface of the server to

QSFP-DD Compatible Switches: Complete 2025 Vendor Guide

Find which switches support QSFP-DD modules. Our 2025 guide covers Cisco, Arista, Juniper and NVIDIA platforms with backward compatibility tips.

OEM 800G QSFP-DD Optical Modules: Technical Overview and

OEM 800G QSFP-DD modules must be fully compatible with major switch and NIC vendors to ensure market acceptance and reduced integration risk.

QSFP-DD Connector System

QSFP-DD Interconnect System enables faceplate density equal to the current 2x1 QSFP form factor, but with 8-lane ports. In other words, a total of 256 differential

QSFP-DD Cage

1x1, 1x4, 2x1 and 2x6 cage configurations Fin- and Pin type heat sink available Industry leading signal integrity (SI report on request) Up to 112Gbps-PAM4 per

High-Speed Hardware and Immersion Cooling Solutions | FIBERSTAMP

Features 1/4/8-channel full-duplex active optical cable 850nm VCSEL transmitter and PIN receiver Hot-pluggable SFP+/QSFP28/QSFP-DD/OSFP/OSFP-RHS MSA-compliant connectors Compliant with

Immersion Liquid Cooling Optics - GIGALIGHT

GIGALIGHT provides 10G to 800G immersion liquid cooling direct attach cable (DAC) products for immersion liquid-cooled data centers, supporting various package types such as SFP+, SFP28,

QSFP Double Density (DD) Interconnect System

Amphenol Commercial QSFP Double Density (DD) Interconnect System is backwards mating compatible with QSFP products. The connectors

Liquid Cooling Solutions

Liquid direct cooling for memory DIMMs. High-grade tubing with low permeation, high-pressure capacity and small bending radii achievable. Hot-swappable quick-disconnect capability for dry disconnect.

QSFP-DD CONNECTORS & CABLE ASSEMBLIES PRODUCT

Our QSFP-DD cages feature a proprietary heat sink design, making them the only solution to work in 15-18W applications at a low cost - providing superior thermal and signal integrity performance.

## Contact Us

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

Website: <https://www.charratcommunication.fr>

Email: [sales@charratcommunication.fr](mailto:sales@charratcommunication.fr)

Phone: +33 1 42 68 93 17

Address: 15 Rue de la Paix, 75002 Paris, France

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

