



Cisco Featured Solutions in Ethernet Alliance 2025 Interoperability Demonstration:

- Transceiver Modules Tested (QSFP-DD 800G ZR, QSFP-DD/OSFP 400G, 800G DR4/FR4/LPO)
- 8212-48FH-M Router
- 8122-64EHF-O Router

Cisco believes in open networking and is proud to be actively involved in driving standards and multi-vendor interoperability collaborations that support rapid time to market and economies of scale. Cisco has made significant contributions to multiple industry standards efforts including IEEE 802.3, OIF, LPO MSA, 100G Lambda MSA, QSFP-DD MSA, and OSFP MSA. In many cases, Cisco initiated and co-led these projects as well as drove the technical direction to ensure our customer's interoperability requirements were met.

8212-48FH-M Router

The Cisco 8212-48FH-M is a high-bandwidth router designed for various networking roles offering maximum performance and scalability. It leverages a Router-on-Chip (RoC) architecture, providing comprehensive routing capabilities with a single Cisco Silicon One™ P100 NPU.

Cisco 8212-48FH-M Router

The 8212-48FH-M offers up to 19.2 Tbps of network bandwidth while consuming less power compared to similar systems, all within a compact 2 RU form factor. The port density allows for flexible port rate configurations supporting 24 800G QSFP-DD800 or 48 400G QSFP-DD ports with MACsec, making it adaptable to various network demands. Additionally, the router supports advanced automation capabilities with Cisco's IOS XR and Crosswork Network Automation, ensuring efficient network management and operation.

8122-64EHF-O Switch

Large-scale, high-bandwidth AI/ML networks are rapidly evolving, necessitating scalable, programmable, high-radix, low-power switches with advanced load balancing and observability. The Cisco 8122-64EHF-O addresses these requirements efficiently within a 2 RU form factor, hosting 64x800G OSFP ports. It is powered by a single Cisco Silicon One™ G200 NPU, forwarding at 51.2 Tbps, and offers competitive advantages such as a 512 radix to support massive clusters. This router supports the SONiC NOS, allowing operators to develop custom automation and visibility tools to efficiently operate their network.

Cisco 8122-64EHF-O Switch

Coherent Pluggable Optics

Cisco offers the highest quality, market leading QSFP-DD ZR/ZR+ coherent pluggable optics for Routed Optical Networking architectures to provide 100% network coverage from access to ultra long haul with reaches up to 3000km. They are powered by coherent DSPs and silicon photonics leveraging 3D Siliconization that delivers a compact low power consumption device. Key use cases include edge/access, DCI, cloud, & long haul.

QSFP-DD and OSFP 800G Transceivers

The Cisco OSFP 800G transceiver modules are Cisco's new generation of pluggable transceiver modules based on the OSFP specification. These provide 800GE, 2x 400GE, 4x 200GE, and 8x 100GE connectivity options, complying with the Octal Small Form Factor Pluggable (OSFP) MSA for pluggable transceivers. The modules comply with the OSFP configuration with integrated heat sink. These transceivers are used in AI applications for both front-end and back-end networks as well as other data center applications.

The Cisco QSFP-DD800 modules introduce 8x100G and 2x400G Quad Small Form-Factor Pluggable Double-Density (QSFP-DD) modules, offering customers super-high-density pluggable transceivers along with the flexibility of 400 Gigabit Ethernet and 100 Gigabit Ethernet connectivity options. These optics are hot-swappable, allowing for easy installation and replacement without disrupting network operations. They are interoperable with other IEEE-compliant interfaces, ensuring compatibility while providing superior performance, quality, and reliability.

Cisco and Ethernet Alliance

Cisco is proud to apply our domain expertise and industry acumen, working with the Ethernet Alliance to demonstrate and showcase innovations in networking and optics. Our leadership within the Ethernet Alliance demonstrates our commitment to driving multi-vendor interoperability and accelerating deployment-ready products into high-performance networks.

For more information on Cisco's solutions, go to www.cisco.com or OFC booth #3319.

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