



Cisco Systems, Inc.

Cisco Featured Solutions in OIF 2025 Interoperability Demonstration:

- Coherent Pluggables (800ZR QSFP-DD/OSFP, 800G ZR+ QSFP-DD/OSFP, 400G ZR/ZR+ QSFP-DD, 100G ZR QSFP28)
- 8212 Router
- NCS 540 Router
- NCS 1001 Open Line System
- NCS 1000 32-Channel Mux/Demux

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 OIF implementation agreement efforts and other industry standards including co-authoring OIF 400ZR project start and editor, actively driving 800ZR and 800G ZR+, co-authoring OIF 1600ZR project start, and was an OpenZR+ MSA founder member and co-chair.

Coherent Pluggables

Cisco offers the highest quality, market leading coherent pluggables 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.

8212 Router

The 8212 Router is a fixed chassis router that utilizes Cisco's Router-on-Chip (RoC) architecture to deliver full routing functionality with a single ASIC per router. The Cisco 8212 provides up to 19.2 Tbps of network bandwidth with lower power than similar systems in a 2 RU height. It has 24 QSFP-DD 800G or 48 QSFP56-DD 400GbE ports with MACsec.

Cisco 8212 Router



Featured in OIF Interop:

800ZR		
800G ZR+ with Interop PCS		
400ZR		
400G ZR+ +1dBm		
100ZR 100GBASE-ZR		



NCS 540 Router

The 540 Router is a dense combination of 24 x 10GE, 8 x 25GE, and 2 x 100GE ports in a 1RU form factor for lowest power and cost-per-bit in the industry. It is a temperature-hardened product for extended network reach to more challenging and remote locations with minimum environmental control and provides application awareness with Segment Routing and improved network visibility via streaming telemetry. It supports 64-800G speeds.

Cisco NCS 540 Router



NCS 1001 Open Line System

Cisco NCS 1001 DWDM Line System



The NCS 1001 is a 1RU line system that is mechanically optimized for data center environments; is performance optimized for maximum capacity; and provides complete automation of installation and configuration with real-time and fine-grained monitoring. It supports

up to three pluggable modules. The modules can be amplifiers, protection switch or OTDR modules. An unprotected point-to-point or a protected point-to-DWDM line system can be implemented with one NCS 1001 shelf.

Cisco NCS 1000 32-Channel Even Mux/Demux Patch Panel

The 32-Channel Mux/Demux Patch Panel when used with the Flex grid mode on NCS 1001, can be optimized for network architectures with 800ZR, 400ZR and OpenZR+ DCOs. It is a pair of passive Athermal Arrayed Waveguide Grating (AAWG) based modules.

Cisco NCS 1000 Mux/Demux Patch Panel



Each mux/demux panel allows the multiplexing and demultiplexing of 32 channels with 150-GHz spacing in the C-Band and can support optical signal up to 140 GBd.

CMIS – Enabling Multi-Vendor Interop

Cisco and other OIF members are demonstrating physical layer management interoperability, enabled by CMIS, across diverse network equipment and pluggable modules including transceivers and cables. The demonstration includes the CMIS industry-standard management interface for a common network control platform, showing interoperability among different plug types, switches/routers and test-measurement equipment, all from different vendors and all operating using the CMIS family of specification documents.

Cisco and OIF

Cisco is proud to apply our domain expertise and industry acumen, working with OIF to accelerate optical networking innovations. Our leadership with OIF demonstrates our commitment to change the way networks are deployed.

For more info on coherent modules, visit www.acacia-inc.com. For more info on Cisco's solutions, go to www.cisco.com or OFC booth #3319.