

OLT Optical Line Terminal QSFP-DD



Article Overview

QSFP-DD certification for OLTs ensures interoperability, performance, and compliance of 400G optical modules in high-speed optical networks.

Overview of QSFP-DD in OLTs

QSFP-DD (Quad Small Form-Factor Pluggable Double Density) is a high-speed optical module standard designed to support 400G client interfaces and beyond. In OLTs, QSFP-DD modules are used to provide high-capacity, low-latency optical links for point-to-multipoint or DWDM networks, enabling scalable fiber-to-the-home (FTTH) and data center interconnects. The QSFP-DD form factor adds an extra row of electrical contacts compared to standard QSFP, supporting eight-lane electrical interfaces for higher bandwidth.

Certification and Testing Requirements

Certification of QSFP-DD modules for OLT deployment involves several key steps:

- **Interoperability Testing:** Ensures the QSFP-DD module works seamlessly with OLT hardware and other network elements, including routers and DWDM systems.
- **Performance Validation:** Measures parameters such as bit error rate (BER), optical power levels, latency, and reach to confirm the module meets 400G or 400ZR specifications.
- **Environmental and Reliability Testing:** Modules are tested under temperature, humidity, and vibration conditions to ensure stable operation in field deployments.



Article Content

The latest optical line termination (OLT) solutions for 2024

A look at the market for network optical line termination (OLT) equipment and some of the products and solutions available.

Cisco QSFP-DD Pluggable Open Line System (QDD OLS) Transceiver

The Cisco QSFP-DD Pluggable Open Line System (QDD OLS) is an advanced optical amplifier transceiver designed to simplify and

Customized OLT Optical Line Terminal QSFP-DD

Deploy Cisco NCS1K-OLT-C 1010 Optical Line Terminal with 400G line rate and 2x QSFP-DD for scalable C-band DWDM transport.

OLT Types: Comprehensive Guide to Optical Line Terminal Solutions

OLT (Optical Line Terminal) types represent crucial components in modern fiber optic networks, serving as the endpoint hardware

Cisco QSFP-DD Pluggable Open Line System (QSFP-DD OLS)

This latest offering from Cisco, the QSFP-DD OLS, is a “pluggable open line system” solution that perfectly integrates into the Cisco

Cisco NCS1K-OLT-C Optical Line Terminal 400G C-band QSFP-DD

Deploy Cisco NCS1K-OLT-C 1010 Optical Line Terminal with 400G line rate and 2x QSFP-DD for scalable C-band DWDM transport.

Guide to Optical Line Terminal (OLT) Classifications: Detailed Types ...

Explore the different classifications of OLT equipment, understanding each type's unique functions and applications. Read this article

Cisco QSFP-DD Pluggable Open Line System (QSFP-DD OLS)

The QSFP-DD-OLS has two bidirectional optical ports: the COM-RX/TX that shall be connected to the Multiplexer / Demultiplexer

Cisco QSFP-DD Pluggable Open Line System

Cisco QSFP-DD Pluggable Open Line System - optical amplifier and multiplexer in a pluggable form factor deployed in routers.

Cisco QSFP-DD Pluggable Open Line System (QDD OLS) Transceiver

Built in a compact QSFP-DD form factor, it integrates full open line system functionality directly into routers, eliminating the need for

What is OLT (Optical Line Terminal)? Types, Features & Applications

The full form of OLT is optical line terminal, which is a device used to connect the optical fiber and transfer signals. It's

50GPON OLT QSFP DD Optical Transceiver Module | Superxon

50G PON OLT QSFP-DD optical transceiver module for high-speed fiber access networks. Supports multi-rate transmission, low

QSFP-DD Connector System

QSFP-DD Interconnect System's 8-lane electrical interface transmits 28G NRZ, 56G PAM-4 and 112G PAM-4, up to 200, 400 or 800

Cisco NCS1K-OLT-C Optical Line Terminal 400G C-band QSFP-DD

Cisco's NCS1K-OLT-C NCS 1010 Optical Line Terminal offers advanced C-band transmission for optical networks. With superior

OLT Devices| High-Quality Optical Line Terminals

Explore our range of high-quality GPON, EPON, and XG(S)PON OLT products. Find the perfect Optical Line Terminal solutions for

Contact Us

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

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

Email: info@yachtchartercapetown.co.za

Phone: +27 21 863 4927

Address: 1st Floor, The Towers, 1 St George's Mall, Cape Town, 8001, South Africa

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

