

10G Tunable Optical Module Test Report



Article Overview

10G optical modules, including SFP+ and XFP transceivers, have been tested for high-performance transmission, link reliability, and diagnostic monitoring, confirming compliance with 10G Ethernet standards.

Key Performance Testing

Transmission and Link Performance: 10G optical modules such as the SFP+-LR-10G and XFP-10G-1550NM-80KM-SM were tested for Ethernet transmission over single-mode fiber (SMF). The SFP+-LR-10G supports up to 10km, while the XFP module supports up to 80km at 10G rates, maintaining stable connectivity and low error rates under laboratory conditions (Moduletek, Huawei) . **Optical Power and Signal Integrity:** Modules were evaluated for TX output power and RX input sensitivity, ensuring optical signals remain within the standard thresholds. Tests confirmed that output power relative to 1mW and received power levels meet specifications, with no transmitter faults or loss-of-signal alarms observed . **Digital Diagnostic Monitoring (DOM):** DOM readings were verified for all modules, including temperature, voltage, bias current, and optical power. All values were within acceptable ranges, and no alarms were triggered, indicating reliable real-time monitoring capabilities .

On-Device Identification and Compatibility

Modules were connected to switches such as Cisco C9500-24Y4C and Quidway S9303. The devices successfully recognized the transceiver type, vendor, model number, wavelength, and transmission distance. This confirms plug-and-play compatibility and accurate reporting of module information

Article Content

Feb 19, 2026

Optimizing Optical Networks with DWDM Tunable SFP+ Modules

FS's 10G Tunable DWDM SFP+ Modules offer flexible, high-performance optical solutions for data centers, MANs,

Jul 13, 2026

10GBASE-ZR SFP+ 1550nm 80Km Transceiver | FS

Test Assured Program FS truly understands the value of compatibility and interoperability to each optics. Every module

Aug 25, 2025

Datasheet QuantumWave 10G Tunable Optical Transceiver

OVERVIEW The QuantumWave™ 10G Tunable Optical Transceiver is a state-of-the-art tunable optical transceiver designed

Dec 31, 2025

OpticalTransceiver TestReport

Test Purpose +-LR-10G optical transceiver. Our testing confirms the module delivers high-performance transmiss ion II.

Aug 21, 2025

Huawei SFP-10G-CU3M High-Speed Copper Cable Sample Test Report

Actual test results confirm that all key parameters of the SFP-10G-CU3M cable meet Huawei's official specifications.

Jun 08, 2026

TransceiverPerformance

... 19 1. Introduction This report presents the reliability test results for 10Gb/s 10Km SFP. 1. 10 nm t. ansceivers. 2. Purpose The

May 22, 2026

TSFP10G-80 (I)

The TSFP10G-80 (I) optical transceiver module supports 10G Ethernet transmission over distances of up to 80 kilometers using

Oct 20, 2025

Physical Layer Compliance Testing for 10GBASE-T

0,000 10G optical and CX4 switch ports shipped. Compare this to the 5 to 6 million 1G copper switch ports (1000BASE-T) which ship

May 28, 2026

SO-TSFP-10G-ZR-DWDM-I

OVERVIEW The SO-TSFP-10G-ZR-DWDM-I is a high performance DWDM transceiver that is tunable to 96 channels in the 50GHz

Nov 21, 2025

Cisco Industrial Temp 10GBASE Dense Wavelength-Division Multiplexing ...

The Cisco iTemp 10GBASE Dense Wavelength-Division Multiplexing SFP+ Tunable Module, DWDM-SFP10G-E-I offers the following

Mar 16, 2026

Tunable SFP+ 10G DWDM Serial Optical Transceiver with up to 80

The Lumentum Tunable SFP+ module is a high performance tunable pluggable transceiver for use in the C-band window covering

Aug 25, 2025

Test Specification for 800 Gbit/s PAM4 Optical Module at 100 Gbit/s

The specification is designed for 800 Gbit/s PAM4 optical modules operating at 100 Gbit/s per lane, detailing test procedures for

Jul 01, 2026

TSFP+ 10G DWDM 80 km | HiSilicon Optoelectronics

TSFP+ 10G DWDM96 80 km OM6253ZX210 is a tunable transceiver module designed for 80 km optical communication applications,

Jul 25, 2026

Huawei XFP-10G-1550NM-80KM-SM Optical Transceiver Sample Report

Huawei's XFP-10G-1550NM-80KM-SM optical transceiver supports 10G Ethernet transmission over 80km on single

Dec 29, 2025

Cisco 10GBASE Dense Wavelength-Division Multiplexing XFP Module

The tunable Cisco DWDM XFP supports 80 tunable ITU 50-GHz wavelengths. Cisco DWDM XFP module supports

Jul 01, 2026

SFP-10G-T-30 Test Report (Juniper) FS

2 Enter the test interface, input the account and password, log into the switch and enter privileged mode. 3 According to the switch command

Aug 15, 2025

AOC Cable Test Report

PN: SFP-10G-AOC3M Test by: Maddy I Date: 2026/1/27 I. Test Purpose By building realistic switch use cases, we test whether the

Sep 16, 2025

TI Optical Module 10G SFP+ Total Solution

ABSTRACT TI 10G optical module SFP+ total solution is a complete demonstrated-working optical transceiver solution targeted for

Oct 23, 2025

SFP-10G-BX (10km) Test Report (Juniper) FS

Confirm the brand, quantity and placement of the switches to be tested. Prepare control cables, test software and optical fiber patch

Dec 16, 2025

How to Test Optical Transceiver Modules: Methods, Metrics & Best ...

Learn how to test optical transceiver modules using power meters, BERT testers, and DDM tools. Ensure

Sep 01, 2025

Tunable SFP+ 10G DWDM Serial Optical Transceiver with up to 80

TRS70xxFxCPA000-x Tunable SFP+ 10G DWDM Serial Optical Transceiver with up to 80 km Reach The Lumentum Tunable SFP+

Aug 05, 2025

Understanding SFP+ Transceiver Testing

The SFF-8431 SFP+ standard specifies a simplified transceiver module compared to its 10GbE predecessor, effectively

Dec 28, 2025

SFP+ C-Band Tunable DWDM Optical Transceiver

The FIBERDYNE Tunable SFP+ Optical Transceiver is a fully duplex, integrated fiber serial link at signal Applications 11.3 Gbps.

Jan 23, 2026

Properly Testing and Calibrating 10G SFP+ Transceivers

Read here how to easily test an SFP+ module step by step and ensure that its performance meets the manufacturer's

Sep 24, 2025

Why Optical Module Testing?What are the 10G Optical Module Testing ...

The main purpose of conducting optical module testing is to ensure that the performance of the optical module is

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