# What optical module does the Huawei 7900EX12 use



## Overview

PTN7900 The PTN 7900 series has three product forms: PTN 7900-32, PTN 7900-24, and PTN 7900-12.The PTN 7900 series supports ultra-large ports such as 200GE.

## Key Takeaways

The Huawei 7900EX12 uses Huawei-certified SFP, SFP+, or QSFP optical modules depending on the interface speed, and only certified modules ensure reliable operation.

### Compatible Module Types

The Huawei 7900EX12 switch supports a range of pluggable optical modules depending on the port type and speed: SFP (Small Form-factor Pluggable): Typically used for 1G connections over single-mode or multi-mode fiber. SFP+: Supports 10G connections, compatible with both single-mode and multi-mode fibers. QSFP/QSFP+: Used for 40G connections, often with MPO fiber connectors.

QSFP28: Supports 100G connections, compatible with 100GE interfaces. Modules are further classified by fiber type: Single-mode modules: Suitable for long-distance transmission with high bandwidth. Multi-mode modules: Suitable for short-distance, lower-cost connections.

Wavelengths commonly used include 850 nm, 1310 nm, and 1550 nm, and for advanced deployments, CWDM or DWDM modules may be used for wavelength division multiplexing applications.

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### Certification and Reliability

Huawei requires that only certified optical modules be used to ensure transmission reliability and service stability. Certified modules are labeled with "HUAWEI" and can be verified using commands such as display transceiver or display version on the switch. Using non-certified modules may lead to network instability and Huawei will not provide support for issues caused by uncertified modules.

### Recommendation

For the Huawei 7900EX12: Identify the port type and speed (1G, 10G, 40G, 100G). Select a Huawei-certified optical module matching the port type and fiber type. Verify certification using the switch commands or by consulting Huawei technical support to ensure compatibility and reliability.

By following these guidelines, you can ensure that the 7900EX12 operates at optimal performance with fully supported optical modules.

## Article Content

What Is an Optical Module and Its FAQs (V200)

Describes what an optical module is and FAQs, including the fundamentals, appearance and structure, key performance counters, common types, and naming conventions of optical modules, causes of

WHAT IS AN OPTICAL MODULE AND ITS FAQS (V200)

CloudEngine series switches must use optical modules that are certified for Huawei data center switches. Optical modules that are not certified for Huawei data center switches cannot ensure

Huawei OptiX PTN Series Quick Installation Manual

View and Download Huawei OptiX PTN Series quick installation manual online. Packet Transport Platform. OptiX PTN Series server pdf manual download. Also for: Optix ptn 7900-32.

How to use Huawei optical modules

The following uses the Moduletek SFP-10G-LR module connected to a Huawei S6700 switch as an example to introduce how to read information of the connected optical module on a Huawei switch.

Troubleshooting for Optical Modules on Huawei Switch

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Multi-mode optical modules are applicable to short-distance transmission, while single-mode optical modules are applicable to long-distance transmission. Single-mode ...

OPTICAL MODULES FOR HUAWEI S SERIES SWITCHES

A switch must use optical or copper modules that have been certified for use on Huawei switches. Non-certified optical or copper modules cannot ensure transmission reliability and may affect service

Optical module

Ethernet uses optical modules extensively in its higher rate interfaces. Representative interfaces that are commonly implemented in optical modules include 100GBASE-SR4, 100GBASE-LR4 and

Huawei Unveils StarryLink Optical Modules That Deliver Ultimate

Barcelona, Spain (ANTARA/PRNewswire)- At the Mobile World Congress 2025 (MWC 2025), Huawei launched the StarryLink optical modules, designed to enhance network experiences

Understanding Pluggable Optical Modules

Optical modules are available in various types to meet diversified requirements. Classified by transmission rate Currently, the transmission rates of optical modules cover a wide range. According

Huawei Unveils StarryLink Optical Modules That Deliver Ultimate

Looking ahead, Huawei aims to collaborate with industry partners to further research and innovate in data center network optical modules, promoting intelligent network upgrades and

Understanding Optical Modules

This document explains optical modules, their types, and applications, providing a comprehensive understanding of their functionality and usage.

How to View Optical Module Parameters

If an optical module is installed in a running device, you can run the display transceiver command to view parameters of the optical module, including the center wavelength, transmission distance, fiber

What Is an Optical Module and Its FAQs (V300)

Fundamentals of an Optical Module As an important part of fiber-optic communication, an optical module is a photoelectric converter which converts electrical signals into optical signals and

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Understanding Optical Modules

The transmit power of a long-distance optical module is often larger than its overload power. Therefore, when using such optical modules, select optical fibers of an appropriate length to ensure that the

What Key Performance Counters Does an Optical Module Have ...

We can measure the performance of an optical module based on its key counters. The following describes these key counters for your better understanding.

What Is an Optical Module

An optical module is a device for converting electrical signals to optical signals and vice versa, widely used in telecommunications and data centers.

Types of Optical Modules

Therefore, optical modules are also classified into single-mode and multimode modules to support different optical fibers. Single-mode optical modules are used with single-mode fibers.

What Is an Optical Module

On an optical network, a sender needs to convert electrical signals into optical signals before sending them to a receiver, and the receiver needs to convert received optical signals into electrical signals.

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This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.

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