

Gigabit Huawei Optical-to-Electronic Module



Overview

Optical Modules in General-Purpose Computing Scenarios Huawei offers a comprehensive portfolio of pluggable StarryLink optical modules for data center netw.

Key Takeaways

For Huawei Gigabit Ethernet, SFP optical modules or SFP copper modules (1000BASE-T) are recommended, ensuring Huawei certification for reliable performance.

Module Types and Interfaces

Huawei offers a range of Gigabit optical-to-electronic modules for converting electrical signals to optical signals and vice versa. The main types include: SFP (Small Form-factor Pluggable): Supports 1Gbps transmission over fiber or copper, hot-swappable, and widely used in access and aggregation layers. SFP+: Primarily for 10Gbps, backward compatible with SFP interfaces, suitable for higher-speed networks.

Copper SF

P (1000BASE-T): Uses RJ45 connectors for Gigabit Ethernet over standard copper cabling up to 100 meters, ideal for campus or branch networks without fiber deployment.

Key Selection Criteria

Device Compatibility: Ensure the module is compatible with your Huawei switch or router. Only Huawei-certified modules guarantee stable operation; non-certified modules may cause link instability or service issues. **Transmission Rate:** For Gigabit Ethernet, select SFP or 1000BASE-T modules.

For higher speeds, SFP+ or SFP28 may be required. **Distance and Fiber Type:** SR (Short Reach): Typically for data center connections over multimode fiber. LR/ER (Long/Extended Reach): For metropolitan or long-distance single-mode fiber links.

Copper SF

P: Up to 100 meters over Cat5e/Cat6 cabling. **Environmental and Operational Specs:** Check operating temperature (0°C–70°C for standard modules) and power consumption to match deployment conditions. **Monitoring Features:** Enhanced SFP (eSFP) modules support monitoring of voltage, temperature, bias current, and optical power, useful for network management.

Certification and Reliability

Huawei emphasizes using certified modules labeled with "HUAWEI" to ensure quality and service stability. Certification ensures: Verified electrical/optical conversion performance. Compatibility with Huawei switches and routers.

Reduced risk of link flapping or module damage. For modules delivered after January 1, 2016, certification can be verified via the display label, display version, or display transceiver commands on Huawei devices.

Recommended Use Cases

Fiber SF

P: For Gigabit connections between switches or servers in data centers.

Copper SF

P (1000BASE-T): For short-distance connections in offices or branch networks, reusing existing copper cabling and reducing deployment costs. **eSFP:** When monitoring and diagnostics are required for critical links. By considering module type, speed, distance, certification, and monitoring features, you can select the optimal Huawei Gigabit optical-to-electronic module for your network deployment.

Article Content

Optical Modules in General-Purpose Computing Scenarios

Huawei offers a comprehensive portfolio of pluggable StarryLink optical modules for data center networks, with various models providing flexible plug-and-play solutions tailored to diverse interface

Optical Modules in Intelligent Computing Scenarios

In the AI era, Huawei provides a full range of GE to 800GE optical modules, featuring three major capabilities: Spanning (ultra-long transmission), Stable (ultra-high reliability), and Secure (ultra-solid

Huawei Optical Modules SFP-1000BaseT-G2 Electrical Transceiver,

The Huawei Optical Modules SFP 1000BaseT G2 Electrical Transceiver is a high performance, compact, and energy efficient solution designed for Gigabit Ethernet applications.

HUAWEI Transceiver

What are the models of Huawei Gigabit optical transceivers? Huawei Gigabit optical transceiver models are: SFP-1.25G-LX10, 0231A562, 0231A564, 0231A563,

Huawei eSFP-GE-SX-MM850 Gigabit Optical Module Overview

The eSFP-GE-SX-MM850 optical module is a Huawei Gigabit multimode optical module with DOM/DDM support, which is packaged in an SFP package with a center wavelength of 850 nm.

01-11 PLUGGABLE MODULES FOR INTERFACES

To determine whether optical modules delivered for Huawei S switches before July 1, 2013 are certified ones, contact Huawei technical support. If your optical modules are delivered after July 1, 2013, use

huawei MA5680T/5683T Y2 H80 Y3 H801 GICF GE

The HUAWEI GICF is a 2-port Gigabit Ethernet optical uplink board developed by Huawei, primarily used for uplink connectivity in OLT equipment, supporting

Optic Module Huawei

The GPON (Gigabit Passive Optical Network) modules are specifically designed for fiber-to-home (FTTH) applications. These modules enable the deployment of GPON networks, supporting high

Huawei Compatible Transceivers | EDGE Optical Solutions

We are a supplier of compatible Huawei optical transceiver products that are built to meet reliability and performance requirements. Compatible Huawei transceiver products are widely used among network

HAILE Gigabit optical to power port module SFP-GE-T 1.25G RJ45

Supporting 1.25G data rate and RJ45 interface, this module provides reliable Gigabit Ethernet connectivity up to 100 meters. Fully compatible with major brands including Huawei, H3C, Ruijie,

FR 10 Gigabit SFP+ 10G Optical Module Single-Mode 1310nm Multi

How do you ensure optical module compatibility? Every batch undergoes 100% live testing on Cisco, Huawei, Arista, Juniper, H3C and Dell switches. Custom EEPROM coding ensures digital-level

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

What Is an Optical Module and Its FAQs (V200)

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,

Optical Component Revenue Reaches Nearly \$25B in 2025

BOSTON (January 7, 2026) – AI-driven datacenter and transport builds will push the optical components market revenue to a record high in 2025, with datacom revenue forecast to exceed \$18 billion and

Optical Terminal

The OptiXstar product series extends optical connectivity to every home, enterprise, and campus, bringing families closer and making enterprise operations far more efficient.

Optical Modules in Intelligent Computing Scenarios

Huawei provides a full series of pluggable optical modules. A wide variety of modules give you flexible plug-and-play options for all types of interfaces.

10GE SFP+ Optical Modules

This document provides an overall description of the CE12800 series switches hardware, helping you obtain detailed information about each chassis, power module, fan module, card, cable, and

KD — High-Speed Optical Connectivity Semiconductors

KD designs semiconductor ICs for multi-gigabit optical networking over fiber optics. Solutions for automotive, industrial, and consumer connectivity.

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

