

# Huijue Single-Mode Fiber Optic Transceiver Usage



## AI Overview

The Huijue Single-Mode Fiber Optic Transceiver is a 10G SFP+ module with LC duplex connector, designed for long-distance single-mode fiber communication up to 10 km.

**Key Specifications**

- Form Factor: SFP+ (Small Form-Factor Pluggable Plus)
- Data Rate: 10 Gigabit Ethernet (10GBASE-LR or BIDI variants)
- Fiber Type: Single-Mode Fiber (SMF)
- Connector Type: LC duplex
- Wavelength: Standard 1310 nm for LR modules; BIDI modules operate at 1330 nm TX / 1270 nm RX
- Transmission Distance: Up to 10 km over single-mode fiber
- Duplex Communication: Supports full-duplex operation, including bidirectional (BIDI) modules that transmit and receive over a single fiber strand
- Digital Diagnostics Monitoring (DDM): Available on some models for real-time monitoring of optical power, temperature, and voltage

**Features and Applications**

- Plug-and-Play: Hot-swappable SFP+ module compatible with major networking equipment, including Huawei, Cisco, and other enterprise switches
- High Performance: Designed for reliable long-distance data transmission in enterprise, telecom, campus, and data center networks
- Cost-Effective BIDI Option: Reduces fiber cabling requirements by using a single strand for bidirectional communication
- Seamless Integration: Can be used with media converters to connect fiber to copper Ethernet networks

**Use Cases**

- Data Centers: High-speed uplinks between switches or servers
- Enterprise Networks: Long-distance connections across buildings or campuses
- Telecom Networks: Reliable 10G Ethernet links over single-mode fiber
- Fiber-to-Ethernet Conversion: Integration with media converters for legacy copper networks

The Huijue single-mode transceivers are widely available through distributors and online marketplaces, with datasheets providing detailed electrical and optical characteristics for network planning and deployment.

## Article Content

### Fiber Optic Transceiver Guide | PHILISUN

Single-mode fibers (with  $\sim 9\text{ }\mu\text{m}$  core) transmit one light path, ideal for long distances and high bandwidth. Multimode fibers (with  $50\text{--}62.5\text{ }\mu\text{m}$  cores) carry multiple light paths, used for shorter,

### Huijue Fiber Optic Transceiver Corresponding Optical Module

In the world of fiber optic communications, optical transceiver modules play a pivotal role as interfaces that convert electrical signals to optical signals and vice versa.

### Intro to Networking

Multi-Mode Fiber Back to Top The key difference between Multi-Mode (MM) and Single-Mode (SM) fiber optic cable is the core diameter. The diameter of MM fiber optic cable is substantially larger allowing

### Huijue Fiber Optic Transceiver Corresponding Optical Module

H87MMA5671A2 Huawei GPON CLASS B+ SFP compatible module (PN:03031QHU) is fiber optic transceiver designed for operation over Single-Mode Fiber (SMF) optical cable. It has minimum

fiber optic network cable

Critical Single-Mode Fiber Specs: Attenuation, MFD, and PMD Guidelines for Reliable Network Deployment Discover essential Single-Mode Fiber specifications including attenuation limits,

### Installing Optical Transceivers and Connecting Optical Fibers ...

This section describes how to install optical transceivers on the SFP or SFP+ ports and connect them to the ports of the peer device using optical fibers according to the network plan.

### SFP transceiver BlueOptics 500SSM91 R0001-BO | AiO.lv

Advantages The BlueOptics SFP transceiver offers a standardized SFP form factor for easy hot-plug installation and interoperability with common networking equipment from different vendors. Its LC

### The Ultimate Guide to SFP Modules (2026): Types, Speeds

Confused by SFP vs SFP+? Read the definitive 2026 guide on SFP modules. We explain Single Mode vs Multimode, DDM diagnostics, and how to choose the right transceiver for Cisco, Juniper, and more.

### Optic Modules Datasheet

Data Sheet datasheet is intended to guide the user through the various options available when choosing an optic module for a given platform depending on the architecture.

### Fiber Optic Transceiver Module

Find here Optical Transceiver, Transceiver Module manufacturers, suppliers & exporters in India. Get contact details & address of companies

### Accessories MINI-GBIC-LX-SM1310 1000BASE-SX SFP 1310-nm 10

The MINI-GBIC-LX-SM1310 is aligned to IEEE 1000BASE-LX optical specifications and supports a link length of up to 10 kilometers over a single-mode fiber (SMF) with an LC connector.

### Huijue Optical Module Single Fiber

Our transceiver modules are available for commercial and industrial applications, supporting varying distances from 500m to 160km, depending on multimode or single-mode fiber.

Things to know about Fiber SFPs and Fiber types.

Using right transceivers for the requirement at hand. Ensuring that connections are made within deigned parameters. Click here for the RUCKUS Optics Family Spec Sheet, which provides

### Configuring Unidirectional Single-Fiber Communication

By default, the single-fiber receiving function is disabled. After the command is run, the interface goes up only when the optical modules at both ends are present and can receive optical signals properly.

### Differences Between SC and LC Connectors | LC vs SC connector

Advantages: Durability: SC connectors are known for their robust design, ensuring long-term reliability. Ease of Use: The push-pull mechanism makes SC connectors easy to install and

### The Essential Guide to BiDi Transceivers: Everything You Need to Know

Bi-Directional (BiDi) Transceiver is a compact optical transceiver module that uses WDM (wavelength division multiplexing) technology and is compliant with the SFP multi-source agreement

### 10G BiDi SFP+ TX1550nm/RX1490nm 70KM LC Optical Transceiver

Product Description□10G BiDi SFP+ 1490nm/1550nm 70KM LC Optical Transceiver  
This high-performance bidirectional SFP+ transceiver delivers 10Gbps connectivity over 70km single-mode

### Simplex vs Duplex Fiber Optic Cables: Key Differences & Guide

Confused about simplex vs duplex fiber optic cables? Learn key differences, BiDi & WDM technology, FTTH vs data center use cases, and how to choose the right fiber.

Used 150M/492FT LC to LC Armored Outdoor Fiber Optic Cable, Single Mode ...

Industrial fiber optic communication and SCADA systems Whether you're connecting outdoor cabinets, routing fiber through conduits, or deploying long-distance enterprise backbones, this LC to LC

AVLGEAR Ubiquiti 1G Multi-Mode Optical Module 1G Fiber Transceiver ...

Ubiquiti 1G Multi-Mode Optical Module SFP Transceiver The Ubiquiti 1G Multi-Mode Optical Module offers seamless performance with 1 Gbps data rates, designed for use in multi-mode fiber networks.

Comprehensive Guide to Data Center Fiber Optic Systems | Technical ...

Conclusion The successful implementation of fiber optic systems in data center environments requires comprehensive technical understanding, from the fundamental properties of single-mode and multi

## Contact Us

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

Website: <https://lwazipm.co.za>

Email: [info@lwazipm.co.za](mailto:info@lwazipm.co.za)

Phone: +27 82 415 6392

Address: 15 Oxford Street, Rosebank, Johannesburg, 2196, South Africa

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