

User Manual

GSFP-1310R-20-SMF - 1.25 Gbps Singlemode SFP Transceiver

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1. Introduction

The **GSFP-1310R-20-SMF** is a 1.25 Gbps single-mode SFP transceiver designed for long-distance data transmission applications in fiber optic networks. This device is compatible with various network equipment, facilitating integration into existing systems. The GSFP-1310R-20-SMF supports a distance of up to 20 km, making it ideal for high-speed links in industrial or corporate environments.

2. Technical Specifications

- **Transceiver Type:** SFP (Small Form-Factor Pluggable)
 - **Data Speed:** 1.25 Gbps
 - **Fiber Type:** Singlemode
 - **Wavelength:** 1550nm sending; 1310nm reception
 - **Transmission Range:** Up to 20 km
 - **Connector:** L.C.
 - **Operating Temperature:** -40°C to 80°C
 - **Product dimensions:** 55.5mm × 13.4mm × 8.5mm
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3. Installation

Prerequisites

Before beginning the installation, make sure you have the following items:

- Network device compatible with SFP port. Single-
- mode fiber optic with LC connector. Cleaning tools
- for fiber optic connectors.

Installation Procedure

1. Equipment preparation:

- Turn off the network device before inserting the transceiver.
- Make sure the SFP port is clean and free of dust.

2. Transceiver Insertion:

- Remove the protective cap from the GSFP-1310R-20-SMF transceiver.
- Insert the transceiver into the SFP port of the network device, making sure it is securely connected.

3. Fiber optic connection:

- Plug the fiber optic cable into the LC port of the transceiver.
- Make sure the connection is secure and without tension on the cable.

4. Turning on the device:

- Turn on the network device.
- Verify that the transceiver is operating correctly by using the LED indicators.

4. Connection and Configuration

Transceiver Connection

- Connect both ends of the optical fiber to the network devices you want to interconnect.
- Make sure the polarity of the cables is correctly aligned to avoid transmission problems.

Basic Configuration

- The GSFP-1310R-20-SMF requires no special configuration. However, it is important to verify that the network device correctly recognizes the transceiver and establishes the data connection.

5. LED Indicators and Their Meaning

- **LED On:**The transceiver is correctly inserted and the device recognizes it.
- **LED Off:**The transceiver is not inserted correctly or the device does not detect it.
- **LED Flashing:**Indicator of data transmission or reception activity.

6. Maintenance and Troubleshooting

Preventive Maintenance

- Regularly clean fiber optic connectors to ensure optimal data transmission.
- Avoid exposing the transceiver to extremes of temperature and humidity.

Diagnosing Common Problems

- **Offline:**Verify that the transceiver is properly inserted and that the fiber optic cables are properly connected.
- **Intermittent Connection:**Make sure the fiber optic is clean and in good condition.

7. Precautions and Safety

- Do not look directly at the transceiver port when connected, as it may emit laser light that could damage your eyesight.
- Handle the transceiver with care to avoid physical damage.