Huawei SFP-25G-LR-eKit

25GE SFP28 Optical Module Datasheet

SFP28 Form Factor | 1310 nm | LC Connector | Single-mode Fiber (SMF) | Up to 10 km

Product Overview

The SFP-25G-LR-eKit is a high-performance 25GE SFP28 optical transceiver module designed for high-speed data transmission over single-mode fiber (SMF). Operating at a nominal wavelength of 1310 nm with LC optical connectors, it supports a maximum transmission distance of up to 10 km. The module provides reliable 25 Gbps optical connectivity for compatible enterprise switches.

Basic Information

Item	Details
Model	SFP-25G-LR-eKit
Part Number	02314JSE
Description	Optical Transceiver, SFP28, 25GE, Single-mode Module (1310 nm, 10 km, LC)
Form Factor	SFP28
Connector Type	LC Duplex

Panel Layout & Components



Illustrative module layout (reference only)

1. Bail / Pull Latch: Quick-release mechanism for module extraction.	2. Module Casing: High-density metallic SFP28 housing with EMI shielding.
3. LC Optical Port: Duplex LC connector interface for 1310 nm SMF link.	4. Host Connector: 20-pin SFP28 gold finger edge connector for switch slot.

Technical Specifications

Item	Specification
Target Application / Speed	25GE (25.78 Gbps)
Wavelength	1310 nm
Fiber Type	Single-mode Fiber (SMF, OS2)
Max Transmission Distance	10 km
Transmitter Type	DFB Laser
Receiver Type	PIN
Transmit Power (Tx)	-8.4 dBm to +2.4 dBm
Receive Power (Rx Sensitivity)	-10.3 dBm

Digital Diagnostics Monitoring (DDM)

Parameter	DDM Accuracy	Calibration	Description
Temperature	±3°C	Internal	Real-time internal transceiver operating temperature.
Voltage	±3%	Internal	Module supply voltage monitoring (3.3 V nominal).
Tx Bias Current	±10%	Internal	Transmitter laser diode bias current.
Tx / Rx Power	±3 dB	Internal	Real-time optical launch and received power levels.

Functions and Features

Category	Feature	Description
Performance	High-Speed 25G Link	Delivers 25 Gbps full-duplex transmission capability over a single LC single-mode fiber pair up to 10 km.
Monitoring	DDM Support	Supports real-time Digital Diagnostic Monitoring (temperature, supply voltage, Tx bias current, Tx power, Rx power).
Operation	Hot Swapping	Pluggable transceiver module allowing insertion/removal during normal switch operation without service interruption.
Compliance	Standards & Safety	Compliant with SFP28 MSA, IEEE 802.3cc 25GBASE-LR, Class 1 Laser Safety, and RoHS directives.

Operational Maintenance Note: Ensure clean optical connector faces when connecting LC single-mode patch cables. Always keep protective dust plugs installed on the transceiver optical ports when not connected to fiber to prevent contamination.

Source: Huawei Hardware Description, section "SFP-25G-LR-eKit Optical Transceiver Module". Figures and representations in this document are for reference only. Information is subject to change without notice.