

SFP-6451 Version: 1

10Gbps Single-mode BIDI SFP+ Transceiver, 60km, TX 1270nm / RX 1330nm

The LevelOne SFP-6451 is a high performance, cost-effective SFP transceiver. It provides up to 10 Gbps bi-directional data transfer rate at distances up to 60km on a single fiber core. These bi-directional SFP Transceivers allow data transfer in either direction through a single optical fiber by employing separate wavelengths travelling in either direction.

The SFP-6451 transmits using a wavelength of 1270nm and receives using a wavelength of 1330nm. When coupled with the LevelOne SFP-6551 transceiver which transmits at and receives at the opposite rates (1330nm TX and 1270nm RX) you get bi-direction data communication on a single fiber core. The LevelOne SFP-6451 is therefore an optimal solution for a high number of fiber lengths on just a few fibers.

Key Features

- 10Gbps Bi-directional single fiber link
 - Supports Digital Diagnostics Monitoring Interface (DDMI) for easy status monitoring
 - Compliant with IEEE 802.3ae 10GBase-LR, 10GBase-LW standards
 - Compatible with SFP Multi-Sourcing Agreement (MSA) standards
 - Hot-swappable providing non-stop service
 - RoHS compliant and Lead Free
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Specifications

System Specifications

Standards:

- IEEE 802.3ae 10GBase-LR
- IEEE 802.3ae 10GBase-LW

Protocols:

SFP Multi-Sourcing Agreement (MSA) SFF-8472 SFF-8431 SFF-8432

Port:

- Bi-directional
- 9/125 μ m Single-mode Fiber
- Duplex LC Receptacle

Wavelength (nm):

TX 1270nm/ RX 1330nm



Optical Receive Sensitivity:

-20dBm

Optical Link Power Budget:

- TX Power: 1 to 6dBm
- RX Power: -20 to -7dBm

Power Input:

3.47V / 350mA

Power Consumption:

<1.0W (0 to 70°C)
<1.5W (-40 to 85°C)

Data Rate:

Up to 10.3Gb/s data links

Optical Transmission Power:

6dBm

Operating Temperature (°C):

0 to 70°C

Operating Humidity (Non-condensing):

0 to 85%

Storage Temperature (°C):

-40 to 85°C

Features

General:

Hot-swappable

Management:

DDMI (Digital Diagnostics Monitoring Interface)

Performance

Operating Distance:

60km

Physical Specifications

Dimensions (W x D x H mm):

13.7 x 56.5 x 11.8 mm

Weight (g):

20g

Approval and Compliance

EMI/EMS:

CE

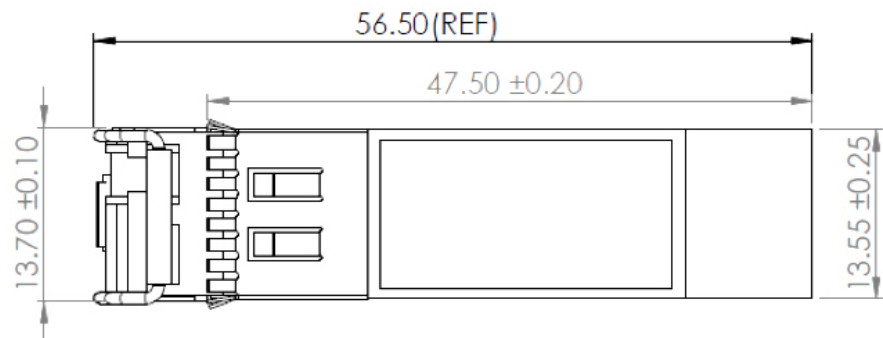
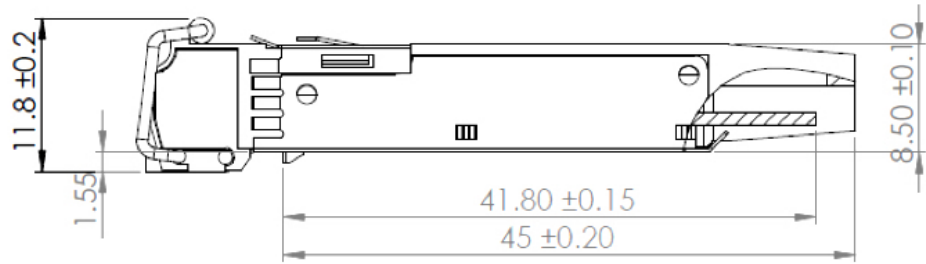
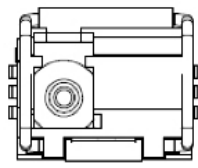
Safety:

- EMI compatible with FCC Part 15 Class B EN55022 Class B (CISPR 22B) VCCI Class B
- Laser Eye Safety compatible with FDA 21CFR 1040.10 and 1040.11 EN60950, EN (IEC) 60825-1,2
- Immunity compatible with IEC 61000-4-3
- ESD to the Electrical PINs: compatible with MIL-STD-883 Method 3015
- ESD to the Duplex LC Receptacle: compatible with IEC 61000-4-2

Environmental Test:

RoHS

Diagram



Unit : mm

Order Information

SFP-6451

Package Contents

SFP-6451

Quick Installation Guide

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