



SFP-6551 Version: 1

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

The LevelOne SFP-6551 is a high performance, costeffective SFP transceiver. It provides up to 10 Gbps bidirectional 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-6551 transmits using a wavelength of 1330nm and receives using a wavelength of 1270nm. When coupled with the LevelOne SFP-6451 transceiver which transmits at and receives at the opposite rates (1270nm TX and 1330nm RX) you get bi-direction data communication on a single fiber core. The LevelOne SFP-6551 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

#### **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 µm Single-mode Fiber
- Duplex LC Receptacle

#### Wavelength (nm):

TX 1330nm/ RX 1270nm

#### Optical Receive Sensitivity:

-20dBm

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#### Optical Link Power Budget:

TX Power: 1 to 6dBmRX 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:

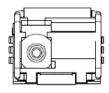
- EMI compatible with FCC Part 15 Class B EN55022 Class B (CISPR 22B) VCCI Class B
- Laser Eye Safety compatible with FDA 21CFR 1040.10 and 1040.11 EN60950, EN (IEC) 60825-1,2
- Immunity compatible with IEC 61000-4-3
- ESD to the Electrical PINs: compatible with MIL-STD-883 Method 3015
- ESD to the Duplex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

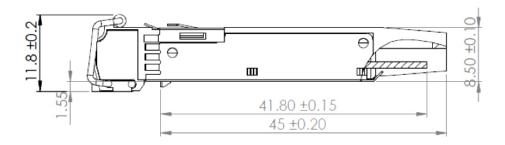
#### **Environmental Test:**

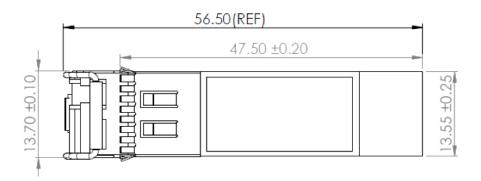
RoHS

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### **Diagram**







Unit: mm

#### **Order Information**

SFP-6551

## **Package Contents**

SFP-6551 Quick Installation Guide

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