

# SFP-1000BaseLX-RGD

# 1.25Gb/s 1310 nm Industrial Ethernet SFP transceiver family

## DESCRIPTION

The SFP-1000Base-LXD optical transceivers are fully compliant with the SFP Multi-Source Agreement (MSA). The modules are hot pluggable and digital diagnostic functions are available via an I2C serial bus specified in the SFP MSA SFF-8472. They meet the requirements of IEEE 802.3 Gigabit Ethernet standard and ANSI Fibre Channel specifications, and are suitable for interconnections in Gigabit Ethernet and Fibre Channel environments.

The transceivers are high performance, cost effective modules supporting dual data-rates of 1.25 Gb/s and 1.0625 Gb/s and transmission of up to 40 km on 9/125 $\mu$ m SM fiber or 550 m on 62.5/125  $\mu$ m MM fiber. The transceivers have been tested according to European and American product safety and electro-magnetic compatibility regulations.

These transceivers are built to withstand extreme temperatures and are suitable for industrial environments and other applications where climate control is a challenge.

## APPLICATIONS

- 1000Base-LX
- 1G Fibre Channel
- High/low temperature environments

#### FEATURES

- Up to 550 m transmission on MM fiber
- Up to 40 km transmission on SM fiber
- Operating wavelength 1310 nm
- Dual data-rate of 1.25 Gb/s and 1.0625 Gb/s
- SFF-8472 Digital Diagnostic Monitoring
- Hot-Pluggable SFP footprint
- Compatible with Small-Form Pluggable (SFP) MSA
- Duplex LC interface for fiber pair operation
- Standard operating temperature -40 °C to 85 °C
- Single +3.3 V power supply

#### LASER SAFETY

This transceiver is a Class 1 laser product. It complies with IEC-60825 and FDA 21 CFR 1040.10 and 1040.11. The transceiver must be operated within the specified temperature and voltage limits. The optical ports of the module need to be terminated with an optical connector or a dust plug.

#### **OPTICAL PARAMETERS**

Part no.	Fiber type	Wavelength [nm]	Opt. Output Power [dBm]	Opt. Receiver Sensitivity [dBm]	Power Budget [dB]
SFP-1000BaseLX-RGD	SM/MM	1310	-9 to -3	-19 to -3	10
SFP-1000BaseL40-RGD	SM/MM	1310	-5 to 0	-24 to -3	19

#### ORDERING INFORMATION

Part no.	Description
SFP-1000BaseLX-RGD	SFP, 1.25Gbps GigE, DDM, 1310nm, SM/MM, 10dB, 10km, Rugged
SFP-1000BaseL40-RGD	SFP, 1.25Gbps GigE, DDM, 1310nm, SM/MM, 19dB, 40km, Rugged

