

SFP 1310nm 2.5Gbps LX 20km Transceiver

SFP Series



The SFP 2.5Gb/s 1310nm LX transceiver is a compact, high-performance optical module designed for up to 20 km transmission over single-mode fiber (SMF). Supporting data rates up to 2.5 Gb/s, it is ideal for telecom and enterprise applications such as SDH/STM-16, SONET OC-48, and Fiber Channel links. The hot-pluggable SFP form factor ensures easy deployment and flexibility across a wide range of networking platforms.

The module utilizes a reliable 1310 nm DFB laser transmitter and a high-sensitivity receiver, providing stable optical performance for medium-reach applications. The optical interface features a duplex LC connector, while the module operates on a standard +3.3V power supply. With low power consumption typically below 1.5W, it offers an efficient and cost-effective solution for 2.5G optical communication.

Fully compliant with SFF-8472 digital diagnostic monitoring (DDM), the transceiver enables real-time monitoring of key operating parameters including temperature, voltage, and optical power. Designed for robust operation, it supports both commercial (0°C to 70°C) and industrial (-40°C to 85°C) temperature ranges, and is RoHS compliant and lead-free, making it suitable for carrier-grade and industrial networking environments.

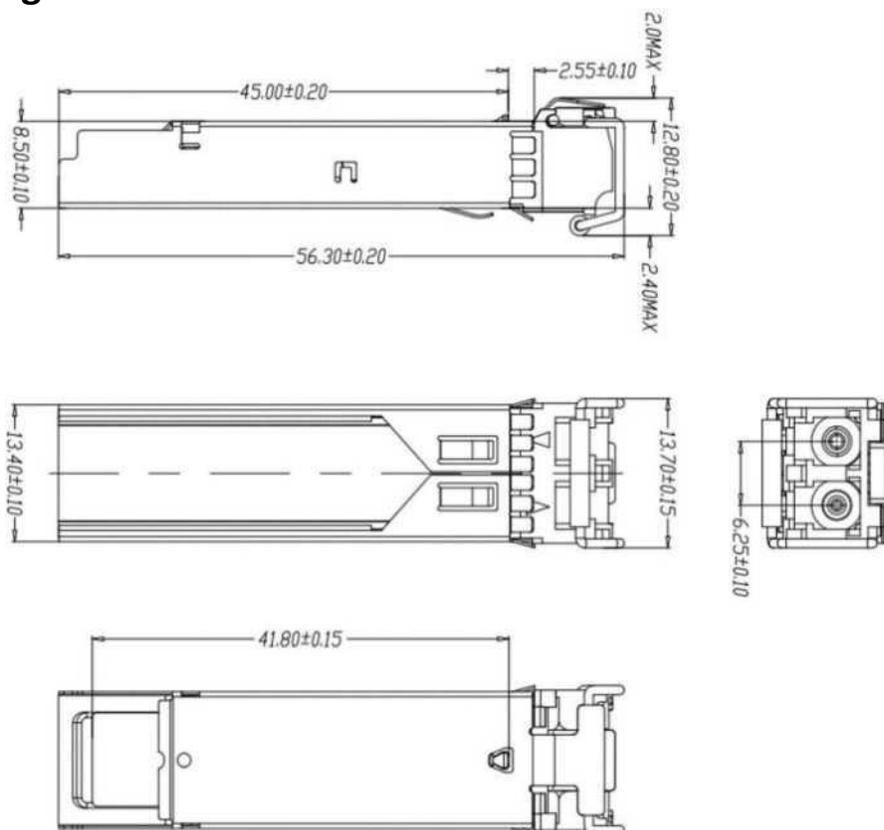
Key Features

- Up to 2.5Gb/s Data Links
- Up to 20 km reach on 9/125pm SMF
- DFB laser transmitter
- Duplex LC connector
- Monitoring Interface Compliant with SFF-8472
- Low power consumption (<1.5W typically)
- Wide operating temperature: 0°C~70°C / -40°C~85°C

Specifications

Parameter	Symbol	Min.	Typ.	Max.	Unit
Operating Case Temperature	T_c	0		+70	°C
		-40		+85	°C
Center Wavelength	λ_c	1290	1310	1330	nm
Optical Output Power	P_{out}	-9		-3	dBm
Optical Input Wavelength	λ_c	1100		1600	nm
Optical Input Power	P_{in}	-24		-1	dBm
RX Sensitivity	S_{en}			-24	dBm
Single Ended Data Input Swing	$V_{in,pp}$	200		1200	mVp-p
Single Ended Data Output Swing	$V_{out,pp}$	300		1000	mv

Outline Diagram



Ordering Information

Product Name	Product Description
SFP-2G-LP-31-20	SFP Plug-in, 2.5Gbps, 20km, TX=1310/RX wide, on two single mode fibres, LC/PC
SFP-2G-LP-31-20A	SFP Plug-in, 2.5Gbps, 20km, TX=1310/RX wide, on two single mode fibres, LC/PC, -40 to +85°C



Ascent Communication Technology Ltd

AUSTRALIA

140 William Street, Melbourne
Victoria 3000, AUSTRALIA
Phone: +61-3-8691 2902

Hong Kong SAR

Room 1210, 12th Floor, Wing Tuck Commercial Centre
181 Wing Lok Street, Sheung Wan , Hong Kong SAR
Phone: +852-2851 4722

CHINA

Unit 1933, 600 Luban Road
200023, Shanghai, CHINA
Phone: +86-21-60232616

USA

2710 Thomes Ave
Cheyenne, WY 82001, USA
Phone: +1 203 350 9822

EUROPE

Pfarrer-Bensheimer-Strasse 7a
55129 Mainz, GERMANY
Phone: +49 (0) 6136 926 3246

VIETNAM

11th Floor, Hoa Binh Office Tower
106 Hoang Quoc Viet Street, Nghia Do Ward
Cau Giay District, Hanoi 10649, VIETNAM
Phone: +84-24-37955917

WEB: www.ascentcomtec.com

EMAIL: sales@ascentcomtec.com

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Ver. ACT_SFP-2G-LP-31-20_Overview_V1b_Mar_2025