10 Gb/s 1310nm SFP+ 10 km Transceiver

SFP+ Series

The transceiver consists of five sections: the LD driver, the limiting amplifier, the digital diagnostic monitor, the 1310nm FP laser and the PIN photo-detector. The module data link up to 10 km using 9/125 µm single-modefiber.

The optical output can be disabled by a TTL logic high- level input of Tx Disable, and the system also can disable the module via I2C. Tx Fault is provided to indicate that degradation of the laser. Loss Of signal (LOS) output is provided to indicate the loss of an input optical signal of receiver or the link status withpartner.

The system can also get the LOS (or Link)/Disable/Fault information via I2C register access. The metal housing ensures low EMI interference standards, with connector retainer.
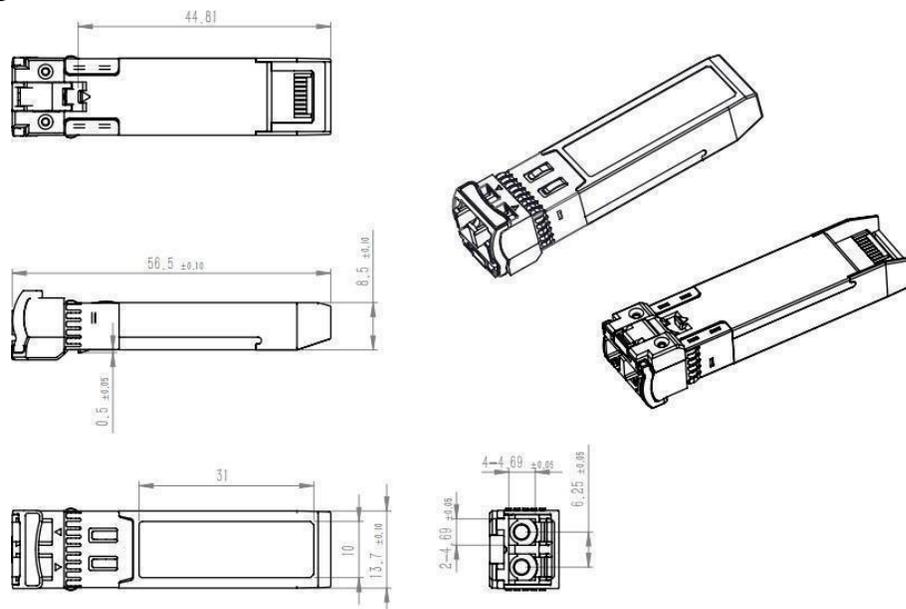
Key Features

- Support data rate up to 11.32Gb/s
- Hot-Pluggable SFP Footprint and Dual LC Connector
- Up to 10km reach for G.652 SMF
- 1310nm DFB laser and PIN receiver
- ESD protect
- Low EMI metals
- Temperature Range:

  Commercial: 0°C to +70°C

  Industrial: -40°C to +85°C
- Compliant with SFP-8431
- Compliant with SFP-8432
- Compliant with SFP-8472
- Compliant with IEEE802.3ae

Specifications

Parameter	Symbol	Min.	Typ.	Max.	Unit	Note
Operating Case Temperature	T_{OP}			70	°C	Commercial
		-40	-	85		Industrial
Power Supply Voltage	V_{CC}	3.1	3.3	3.5	V	
Data Rate	BR	1.25	10.3125		Gbps	
Transmission Distance	TD			10	km	
CML Inputs(Differential)	V_{in}, pp	180		700	mV	
CML Outputs (Differential)	V_{out}	350		700	mVpp	
Data Rate	V_{CC}	1.25	10.3125	11.32	Gbps	
Center Wavelength	λc	1260	1310	1355	nm	
Average Output Power	Pout	-8.2		0.5	dBm	
Average Power of OFF Transmitter	Poff			-30	dBm	
Wavelength Range	$λ_C$	1260		1620	nm	

Outline Diagram

Ordering Information

Product Name	Product Description
SFPP-ATLP-31-10	SFP+ plug-in, 10 Gbps, 10 km, TX=1310/RX wide, on two single-mode fibers, LC/PC Blue
SFPP-ATLP-31-10A	SFP+plug-in, 10 Gbps, 10 km, TX=1310/RX wide, on two single-mode fibers, LC/PC Blue, Industrial Temp -40 to +85°C
JSPP-ATLP-31-10	SFP+ plug-in, 10 Gbps, 10 km, TX=1310/RX wide, on two single-mode fibers, LC/PC Blue, Compatible with Juniper
JSPP-ATLP-31-10A	SFP+plug-in, 10 Gbps, 10 km, TX=1310/RX wide, on two single-mode fibers, LC/PC Blue, Industrial Temp -40 to +85°C, Compatible with Juniper

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