DATASHEET

IO-SFP-CF-XS-ZR

IO, 10G Optical Long Extended Range SFP+



Description

The IO-SFP-CF-XS-ZR is a long reach SFP+ transceiver designed for 10 Gigabit Ethernet and 10G Fiber Channel applications. It operates over single mode fiber using a cooled 1550nm EML laser transmitter and an APD receiver and supports transmission distances up to 80km.

The module supports data rates from 1.0Gbps to 10.7Gbps and conforms to the SFP+ Multi-Source Agreement and the SFF-8472 Digital Diagnostics Monitoring specification. The integrated diagnostics interface provides real time monitoring of temperature, supply voltage, transmit power, receive power, and bias current.

The transceiver is available in Commercial (0°C to +70°C) temperature option which makes it suitable for metro, backhaul, carrier, and long-distance optical network deployments.

Key Specifications

- 10G SFP+ transceiver with duplex LC connector
- 1550nm cooled EML transmitter and APD photodiode receiver
- Supports 1.0Gbps to 10.7Gbps data rates
- Up to 80km transmission distance over single mode fiber
- Less than 2W power consumption
- Temp operating conditions: Commercial (0°C to +70°C)

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Technical Data

Parameter	Value	Parameter	Value
Form Factor	SFP+	**Transmitter Data**	
Transmission Media	SM (LC)	Tx Power	0 to +4dBm[1)]
Typical Reach	80km	Tx Wavelength	1530-1565nm
Nominal Wavelength	1550nm	Extinction Ratio	≥ 8.2dB
Data Rate Support	1.0Gbps to 10.7Gbps	**Receiver Data**	
Protocol Support	10GbE-LAN, 10GbE-WAN	Rx Sensitivity	-24dBm[1) 2)]
Power Consumption	<2W	Rx Overload, Max	-7dBm[2)]
Operating Temperature	0°C to 70°C	Rx Wavelength	1260-1600nm
Storage Temperature	-40°C to 85°C	LOS Assert	-35dBm
DDM	Yes	LOS De-assert	-25dBm
		LOS Hysteresis	0.5

1. Average Power
2. @10.3Gbps. Measured with PRBS 2^{31}-1 @ BER 1E-12

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Safety/Regulatory Compliance

- Class 1 laser safe
- RoHS Compliance

Absolute Maximum Rating

Parameter	Value
Supply Voltage	-0.5V to 3.75V
Storage Temperature	-40°C to 85°C
Relative Humidity	85%
Max Rx Optical Power	-7dBm

Ordering Information

Model No.	Description
IO-SFP-CF-XS-ZR	IO, 10G Optical Long Extended Range SFP+ Commercial Grade

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