

10G SFP+ ZR 80km

10G Eth, FC, SFP+, ZR, 80km, LC, 1550nm, SM

CPP-10E-ZR-xDF02

OVERVIEW

The CPP-10E-ZR-xDF02 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) and Industrial (-40°C to +85°C) temperature options 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) and Industrial (-40°C to +85°C)

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 / -40°C to 85°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 2³¹-1 @ BER 1E-12

Safety/Regulatory Compliance

- Class 1 laser safe
- RoHS Compliance

ABSOLUTE MAX RATING

Exceeding these limits can cause permanent damage to the transceiver

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

ORDERING INFORMATION

Ordering Code	Description
CPP-10E-ZR-CDF02	10G SFP+, ZR, 80km, LC, 1550nm, SM, 0 to 70C
CPP-10E-ZR-IDF02	10G SFP+, ZR, 80km, LC, 1550nm, SM, -40 to 85C

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