

10G SFP+ ZR 80km with CDR

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

CPP-10E-ZD-CDF02

OVERVIEW

The CPP-10E-ZD-CDF02 is a single mode SFP+ transceiver with built-in TX and RX CDR designed for 10 Gigabit Ethernet and optical communication applications. It uses a 1550nm Cooled EML laser transmitter and a APD photodiode receiver and supports transmission distances up to 80km on single mode fiber.

The module supports data rates up to 11.3Gbps and is compliant with the SFP+ Multi-Source Agreement and SFF-8472 Digital Diagnostics Monitoring standard. Real time diagnostics provide monitoring of temperature, supply voltage, transmit power, receive power, and bias current.

The transceiver operates over a commercial temperature range of 0°C to +70°C and is suitable for 10G Ethernet, SONET/SDH, LTE, and other optical communication systems.

KEY SPECIFICATIONS

- 10G SFP+ transceiver with duplex LC connector
- Built-in TX and RX CDR
- 1550nm Cooled EML laser and APD photodiode receiver
- Supports up to 11.3Gbps data rate
- Up to 80km transmission distance over SMF
- Compliant with SFP+ MSA and SFF-8472
- Operating temperature range: 0°C to +70°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	9.953Gbps to 11.3Gbps	Receiver Data:	
Protocol Support	10GbE-LAN, 10GbE-WAN, CPRI	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	0.5dB

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 4.5V	Relative Humidity	85%
Storage Temp	-40°C to 85°C	Max Rx Optical Power	-7dBm

ORDERING INFORMATION

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

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