

1G SFP FX 2km

1G Eth, SFP, FX, 2km, 1310nm, MM

CP-GB-FX-xDF02

OVERVIEW

The CP-GB-FX-xDF02 is a multimode SFP transceiver designed for Gigabit Ethernet (GbE) and 1G Fiber Channel applications over short-to-medium reach links. It operates with a 1310nm FP laser transmitter and a PIN photodiode receiver, supporting optical transmission distances up to 2km on multimode fiber.

The module supports data rates up to 1.25Gbps and complies with the SFP Multi-Source Agreement (MSA) and the SFF-8472 Digital Diagnostics Monitoring (DDM) specification. Real-time diagnostics provide monitoring of temperature, supply voltage, transmit optical power, receive optical power, and bias current.

The transceiver is available in Commercial (0°C to +70°C) operating temperature ranges, ensuring dependable operation across various access and enterprise network environments.

KEY SPECIFICATIONS

- 1G SFP transceiver with duplex LC connector
- 1310nm FP transmitter and PIN photodiode receiver
- Supports 1.25Gbps Ethernet and 1.063Gbps Fiber Channel applications
- Up to 2km transmission distance over multimode fiber
- Less than 1.0W power consumption
- Temp operating conditions: C-temp (0°C to +70°C)

TECHNICAL DATA

Parameter	Value	Parameter	Value
Form Factor	SFP	Transmitter Data:	
Transmission Media	MMF (LC)	Tx Power	-13 to -3dBm ¹⁾
Typical Reach	2km	Tx Wavelength	1260-1360nm
Nominal Wavelength	1310nm	Extinction Ratio	≥ 9dB
Data Rate Support	10Mbps to 1.25Gbps	Receiver Data:	
Protocol Support	GbE, 1G FC	Rx Sensitivity	-21dBm ^{1) 2)}
Power Consumption	<1.0W	Rx Overload, max	-1dBm ²⁾
Operating Temperature	0°C to 70°C	Rx Wavelength	1260 -1610nm
Storage Temperature	-40°C to 85°C	LOS Assert	-38dBm
DDM	Yes	LOS De-assert	-22dBm
		LOS Hysteresis	0.5dB

¹⁾ Average Power

²⁾ @1250 Mbps, BER ≤ 1x10⁻¹², PRBS 2⁷-1

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	-1dBm

ORDERING INFORMATION

Ordering Code	Description
CP-GB-FX-CDF02	1G SFP, FX, 2km, LC, 1310nm, MM, 0 to 70C

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