

1G SFP EX 40km

1G Eth, SFP, EX, 40km, LC, 1550nm, SM

CP-GB-EX-xDF02

OVERVIEW

The CP-GB-EX-xDF02 is a single mode SFP transceiver designed for Gigabit Ethernet and 1G Fiber Channel applications. It uses a 1550nm DFB laser transmitter and a PIN photodiode receiver and supports transmission distances up to 40km on standard single mode fiber.

The module supports data rates up to 1.25Gbps and complies with the SFP Multi-Source Agreement and the Digital Diagnostics Monitoring as per SFF-8472. The diagnostics interface provides real time monitoring of temperature, supply voltage, transmit optical power, receive optical power and bias current.

The transceiver uses a single 3.3V power supply and is available in Commercial 0°C to +70°C operating temperature option. It is suitable for long reach Gigabit Ethernet links, Fiber Channel networks and 40km point to point optical systems.

KEY SPECIFICATIONS

- 1G SFP transceiver with duplex LC connector
- 1550nm DFB transmitter and PIN photodiode receiver
- Supports 1.25Gbps Ethernet and 1.063Gbps Fiber Channel
- Up to 40km transmission distance over single mode fiber
- Typical power consumption around 1W
- Temp operating conditions: Commercial 0°C to +70°C

TECHNICAL DATA

Parameter	Value	Parameter	Value
Form Factor	SFP	Transmitter Data:	
Transmission Media	SM (LC)	Tx Power	-5 to 0dBm ¹⁾
Typical Reach	40km	Tx Wavelength	1530 -1570nm
Nominal Wavelength	1550nm	Extinction Ratio	≥ 9dB
Data Rate Support	10Mbps to 1.25Gbps	Receiver Data:	
Protocol Support	GbE, 1G FC	Rx Sensitivity	-23dBm ^{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	-24dBm
		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-EX-CDF02	1G SFP, EX, 40km, LC, 1550nm, SM, 0 to 70C

All information contained in this document is subject to change without prior notice at the sole discretion of CloudPhotonix. The company warrants the performance of its products solely in accordance with the current published specifications and applicable warranty terms. CloudPhotonix makes no other warranties, express or implied, including but not limited to any implied warranties of merchantability, fitness for a particular purpose, or non-infringement of third-party rights. For the most current certification and compliance information, please contact CloudPhotonix.

CONTACT INFORMATION

Email: sales@cloudphotonix.com
Phone: +91-1203116709, +91-1203116718
CloudPhotonix India Pvt. Ltd.
Block A-51, Sector 67
Noida – 201301, Uttar Pradesh, India