

1G SFP LX 10km

1G Eth, SFP, LX, 10km, 1310nm, SM

CP-GB-LX-xDF02

OVERVIEW

The CP-GB-LX-xDF02 is a single mode SFP transceiver designed for Gigabit Ethernet and 1G Fiber Channel applications. It uses a 1310nm FP laser transmitter and a PIN photodiode receiver and supports transmission distances up to 10km on standard single mode fiber.

The module supports data rates up to 1.25Gbps and complies with the SFP Multi-Source Agreement and the SFF-8472 Digital Diagnostics Monitoring specification. The DDM interface provides real time reporting of temperature, voltage, transmit power, receive power and laser bias current.

The transceiver is available in Commercial 0°C to +70°C and Industrial –40°C to +85°C temperature variants, allowing deployment across various access and enterprise 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
- Up to 10km transmission distance over single mode fiber
- Power consumption around 1W
- Temp operating conditions: C-temp 0°C to +70°C, I-temp –40°C to +85°C.

TECHNICAL DATA

Parameter	Value	Parameter	Value
Form Factor	SFP	Transmitter Data:	
Transmission Media	SM (LC)	Tx Power	-9 to 0dBm ¹⁾
Typical Reach	10km	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	-23dBm ^{1) 2)}
Power Consumption	<1.0W	Rx Overload, max	-1dBm ²⁾
Operating Temperature	0°C to 70°C / -40°C to 85°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⁾ @1250Mbps, 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-LX-CDF02	1G SFP, LX, 10km, LC, 1310nm, SM, 0 to 70C
CP-GB-LX-IDF02	1G SFP, LX, 10km, LC, 1310nm, SM, -40 to 85C

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 directly.

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