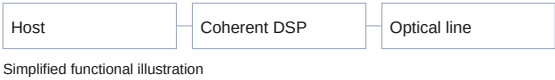


CFP2-200G-DCO

200G CFP2 DCO Coherent module Tunable / Support ultra long distance without DCM

1. Product overview

200G/100G Coherent CFP2-DCO Transceiver – Up to 1000 km / 2000 km The CFP2-200G-DCO is a high-performance coherent CFP2-DCO optical transceiver designed for long-distance DWDM transmission in metro, regional and DCI networks. The module supports flexible 100G and 200G transmission, with reach beyond 1000 km at 200G and up to 2000 km at 100G over single-mode fiber. The transceiver integrates coherent DSP functionality and supports PM-16QAM, PM-QPSK and PM-DQPSK modulation together with SD-FEC. It is designed for installation directly into CFP2-DCO compatible host systems, eliminating the need for an external coherent transponder in suitable applications.



2. Key features

CFP2-DCO coherent optical transceiver • Supports 100G and 200G flex-rate operation • DWDM C-band operation • 50 GHz ITU-T channel grid

3. Applications

Long-haul DWDM transmission • Metro and regional optical networks • Data Center Interconnect – DCI • 100G / 200G coherent transport • Router-to-router coherent DWDM links • Optical transport platforms • High-capacity point-to-point links

4. Technical data

CFP2-DCO coherent optical transceiver	Supply voltage: Minimum: 3.2 V, Typical: 3.3 V, Maximum: 3.4 V
Supports 100G and 200G flex-rate operation	Maximum supply current: 9 A
DWDM C-band operation	Maximum current per power pin: 1.125 A
50 GHz ITU-T channel grid	Low-power mode: <2 W
Integrated SD-FEC	200G PM-16QAM: up to approximately 26 W
Supports: OTUC2 / OTLC2, OTU4 / OTL4.4	100G PM-QPSK / PM-DQPSK: up to approximately 21 W
CEI-28G-MR compliant host electrical interface	With framer disabled: 200G: approximately 25 W, 100G: approximately 20 W
Hot-pluggable CFP2 form factor	Low-power mode: <2 W.
CFP2 MSA Hardware Specification Rev. 1.0 compliant	Form factor: CFP2-DCO
Integrated line and client PRBS generator/checker	Dimensions: approximately 107.5 × 41.5 × 12.4 mm
Single 3.3 V DC supply	Host connector: 104-pin CFP2
Duplex LC optical interface for single-mode fiber.	Optical connector: Duplex LC
Host electrical interface: CEI-28G-MR	Fiber type: Single-mode fiber
CFP2 electrical connector: 104-pin	Hot-pluggable design.

5. Recommended operating conditions

Operating temperature: -5°C to +70°C	Operating relative humidity: up to 85%
Short-term operating temperature: up to +75°C	Storage relative humidity: up to 85%
Storage temperature: -40°C to +85°C	Maximum specified module storage time: 2 years under controlled room-temperature and humidity conditions.

CFP2-200G-DCO

6. Optical characteristics

Transmission reach: 200G: beyond 1000 km, 100G: up to 2000 km	Optical Transmitter Specifications Optical output power range: -10 to +1 dBm
Tunable frequency range: 191.30 to 196.05 THz	Optical Transmitter Specifications Default output power: approximately +0.5 dBm
200G modulation: PM-16QAM	Optical Transmitter Specifications Output power stability: ±0.3 dB
100G modulation: PM-QPSK, PM-DQPSK	Optical Transmitter Specifications Output power accuracy and stability: ±1 dB
200G mode Host format: OTUC2	Optical Transmitter Specifications Transmitter OSNR: 35 dB/0.1 nm
200G mode Host interface: OTLC2	Optical Transmitter Specifications Optical return loss: 24 dB
200G mode Line modulation: PM-16QAM	Optical Transmitter Specifications Output power with transmitter disabled: maximum approximately -35 dBm
200G mode Baud rate: 39.7 Gbaud	Optical Transmitter Specifications Wavelength switching time: up to 60 seconds
200G mode Minimum channel spacing: 50 GHz	Optical Transmitter Specifications Cold-start transmitter turn-up time: 60–120 seconds.
200G mode FEC: SD-FEC	Optical Receiver Specifications Receiver frequency range: 191.30 – 196.05 THz
200G mode FEC overhead: 25%	Optical Receiver Specifications Optimum input power range: -14 to 0 dBm
200G mode End-of-life Rx OSNR requirement: approximately 17 dB	Optical Receiver Specifications Extended input power range: -18 to 0 dBm
200G mode Typical reach: >1000 km over SMF.	Optical Receiver Specifications Extended range penalty: approximately 0.5 dB OSNR
100G mode Host format: OTU4	Optical Receiver Specifications BOL OSNR tolerance: 200G PM-16QAM: 16.2–16.7 dB/0.1 nm, 100G PM-QPSK: 10.6–11 dB/0.1 nm, 100G PM-DQPSK: 12.3–12.8 dB/0.1 nm
100G mode Host interface: OTL4.4	Optical Receiver Specifications Chromatic dispersion tolerance: 200G: -10,000 to +40,000 ps/nm, 100G: -10,000 to +100,000 ps/nm
100G mode Line modulation: PM-QPSK, PM-DQPSK	Optical Receiver Specifications PMD tolerance: 200G: 25 ps, 100G: 30 ps
100G mode Baud rate: 33.6 Gbaud	Optical Receiver Specifications PDL tolerance: 6 dB
100G mode Minimum channel spacing: 50 GHz	Optical Receiver Specifications Optical input transient tolerance: 6 dB
100G mode FEC: SD-FEC	Optical Receiver Specifications Optical return loss: 27 dB.
100G mode FEC overhead: 25%	
100G mode End-of-life Rx OSNR:; PM-QPSK: approximately 11.5 dB; PM-DQPSK: approximately 13 dB	
100G mode Typical reach: up to 2000 km over SMF.	
Optical Transmitter Specifications Tunable frequency range: 191.30 – 196.05 THz	
Optical Transmitter Specifications Channel grid: ITU-T 50 GHz	

7. Digital diagnostics and management

CFP MSA Management Interface Specification Version 2.6 compatible	Module reset
Supports line loopback	Low-power control
Supports host terminal and facility loopback	Receiver loss-of-signal alarm
MDIO management interface	Module-present detection
Management interface: MDIO	Programmable alarms
MDIO clock: up to 4 MHz	Global alarm output
MDIO data rate: up to 4 Mb/s.	Line PRBS generator/checker
MDIO-based module management	Client PRBS generator/checker
Transmitter disable	Line loopback
	Host terminal/facility loopback.

8. Safety and regulatory

CFP2 MSA Hardware Specification Rev. 1.0 • CFP MSA Management Interface Specification Version 2.6 • CEI-28G-MR • IEC/EN 60825-1 Class 1 laser safety • GR-1089-CORE electromagnetic emission and immunity • GR-63 fire resistance • GR-468 reliability • RoHS compliant.

9. Ordering information

CFP2-200G-DCO 200G CFP2 DCO Coherent module Tunable / Support ultra long distance without DCM

10. General notes

Important: According to the datasheet, the line framing is proprietary, and both ends of the optical connection must use compatible technology when using the specified proprietary SD-FEC/line format. • The source heading says up to 1000 km at 200G; the description and performance data say beyond 1000 km. Both source values are retained. • Technical values and product image: GLOBALfiber product page, Technical Info. Unspecified parameters have not been inferred. Accessed 06.09.2026.