

## Key Highlights:

- **Type:** 100G/200G CFP2-DCO
- **Compatibility:** Multi-Vendor MSA Compatible
- **Tx/Rx Wavelength:** Tunable ITU-T 50GHz C-Band
- **Laser:** Tunable DWDM Coherent
- **Modulation:** DQPSK/QPSK (100G), 16QAM (200G)
- **Fiber Type:** Single-Mode Fiber (SMF)
- **Connectors:** Double LC
- **Optical Budget:** 18.5dB
- **Max. Distance:** 2000km (100G), 1000km (200G) with EDFA
- **Data Rate:** 103.125 to 210.4 Gbps
- **FEC Forward Error Correction:** SD-FEC 25%
- **Test Function:** Line & Client PRBS Generator and Checker
- **Compliance:** OIF-CFP2-DCO, CFP2 MSA Hardware Specification 1.0
- **Power Consumption:** ≤ 21W (100G) / 26W (200G)
- **Temperature:** Standard -5° - 70°C



## Optical Transceiver : 200G-CFP2-DCO

### Product Description:

100G/200G CFP2 DCO module is dual rate (100G/200G) Coherent Multi-Vendor MSA Compatible CFP2 (C (centum) Form Factor Pluggable 2) Transceiver designed for operation over Double Fiber optical cable. On the transmission side, the module converts 25.78Gbps (CAUI-4) or 27.95Gbps (OTL4.4) electrical input channels into one Single Lambda 100G/200G optical signal. Reversely the opposite is done on the receiving side, the module converts one Single Lambda 100G/200G optical signal into 25.78Gbps (CAUI-4) or 27.95Gbps (OTL4.4) electrical input signal. Module has a minimum guaranteed optical budget of 18.5 dB, which in most cases is enough to reach 80km without signal amplification, however the module can reach up to 2000km (100G) or 1000km (200G) with signal amplification. Distance is just an indicative parameter for comfort of identification that is calculated by taking into account minimal optical budget and average attenuation of optical cabling in industry. To achieve high data rate, long haul error-free transmission Soft Decision FEC (Forward Error Correction) with 25% overhead has been implemented on this unit. 200G Coherent CFP2-DCO has advanced DSP (Digital Signal Processor) ASIC and integrated Coherent Transmitter/Receiver which helps to revolutionize the IP routing edge giving it ability to transport IP over DWDM



Network (IPoDWDM). 200G Coherent CFP2-DCO Transmitter and Receivers support PM-DQPSK (polarization-multiplexed differential quadrature phase shift keying) / PM-QPSK (polarization-multiplexed quadrature phase shift keying) modulation for 100G and PM-16QAM (Polarization multiplexed 16-ary quadrature amplitude modulation) for 200G.

200G CFP2 DCO uses tunable DWDM Coherent laser transmitter (ITU-T 50GHz C-Band 96 Channels) and tunable DWDM Coherent (ITU-T 50GHz C-Band 96 Channels) receiver. 200G CFP2-DCO supports DDM/DOM optical diagnostics that provide real-time diagnostic information about the present operating conditions and additionally the module has built-in Line & Client PRBS (pseudorandom binary sequence) generator and checker which can help to diagnose and test the link state. 200G CFP2-DCO operates in Standard -5° to 70°C temperature range and has Double LC connector facing Line side and 104-pin CFP2 MSA-compliant connector towards Host side.

200G CFP2-DCO supports 112.2 to 210.4 Gbps data rate and is designed for Telecom Metro/Long-haul, Wireless Backhaul and Hyperscale Data Center Interconnect (DCI) applications. Transceiver is CE/RoHS certified and CFP2 DCO specification is fully compliant with product safety standards and to CFP2 MSA Hardware Specification 1.0 with modifications, CFP MSA Management Interface Specification 2.6 r06a with modifications, OIF-CFP2-DCO, CEI-28G-MR specifications and OTL4.4/OTLC2 Signaling. Consequently CFP2 DCO, compliance to above standards and specifications guarantees that module is compatible and works with majority of networking equipment, where is not implemented special algorithm for protection against third party modules. However – our technical team has accumulated deep expertise in custom-encoded firmware's for 200G CFP2-DCO transceiver in order to make it work in almost any brand of equipment. We will be glad to know your requirements – Contact Us.

## Product Specification:

General parameter	Value
Media Type:	Single-Mode Fiber (SMF)
Connectors:	Double LC
TX Wavelength:	Tunable 1529.16-1567.13nm
RX Wavelength:	Tunable 1529.16-1567.13nm
Minimum Optical Budget:	18.5dB
Maximum Distance:	2000km (100G), 1000km (200G)
Modulation:	DQPSK/QPSK (100G), 16QAM (200G)
Forward Error Correction (FEC):	SD-FEC 25%
Supported Data Rate:	112.2 to 210.4 Gbps
Supported Applications:	100G Ethernet (103.125Gbps), 200G Ethernet (206.25Gbps), OTU4 (112.2Gbps), OTUC2 (210.4 Gbps)
Digital Diagnostic Monitoring (DDM):	Supported
Test Function:	Line & Client PRBS Generator and Checker



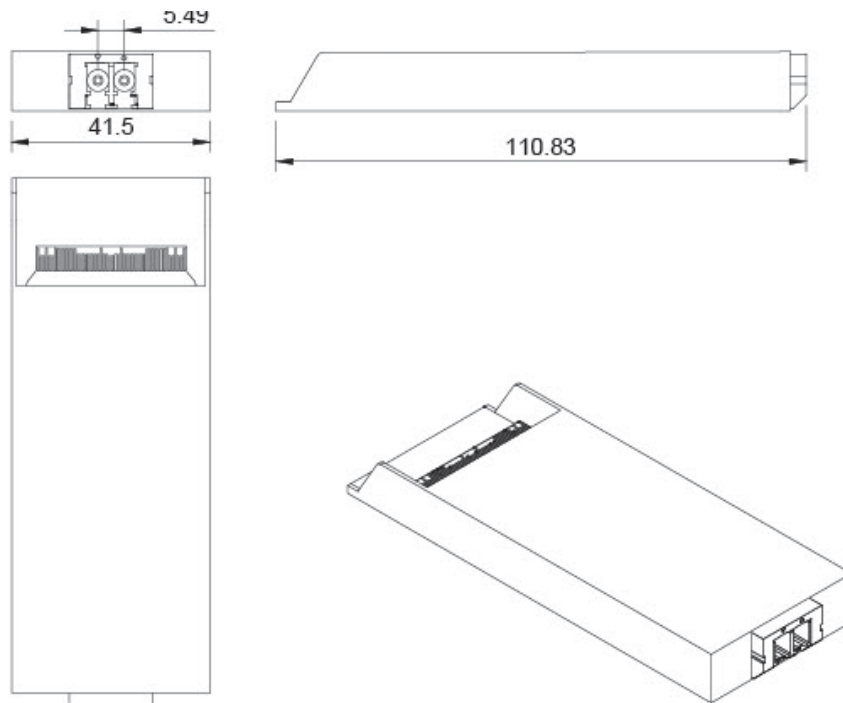
General parameter	Value
Operating Temperature Range:	Standard -5°- 70°C
Storage Temperature Range:	- 40° to 85°C
Relative Humidity (Non-Condensation):	0 to 85%
Power Consumption:	≤ 21W (100G) / 26W (200G)
Power:	+3.3V single power supply
Compliance:	OIF-CFP2-DCO, CE, RoHS, CFP2 MSA Hardware Specification Rev. 1.0, CFP MSA Management Interface Specification 2.6 r06a, CEI-28G-MR, OTL4.4/OTLC2 Signaling

Transmitter Parameters:	Value
Transmitter Type:	Tunable DWDM Coherent
Tx Wavelength Bandwidth:	ITU 50Ghz C-Band Grid
Average Launch Power Each Lane (Max):	1 dBm
Average Launch Power Each Lane (Min):	-10 dBm

Receiver Parameters:	Value
Receiver Type:	Tunable DWDM Coherent
Rx Wavelength Bandwidth:	ITU 50Ghz C-Band Grid
Optimum Input Power (Min):	-14 dBm
Optimum Input Power (Max):	0 dBm
Extended Input Power (Min):	-18 dBm
Extended Input Power (Max):	0 dBm
Receiver Overload:	1 dBm



## Mechanical Dimensions



## Compatibility:

EDGE Optical transceivers can be provided with custom-encoded firmware, in order to provide compatibility with more than 100 vendor brands in data and telecom communications industry:

**MS** - General MSA  
**AD** - ADVA  
**AE** - Advantech  
**AL** - Alcatel (Nokia)  
**AT** - Allied Telesis  
**AR** - Arista  
**AS** - Arris  
**AV** - Avaya  
**BC** - Barracuda  
**BR** - Broadcom  
**QL** - Cavium (Qlogic)  
**CR** - Ceragon  
**CP** - Checkpoint  
**CH** - Chelsio  
**CN** - Ciena  
**CI** - Cisco  
**LI** - Cisco (Linksys)  
**CE** - Comnet  
**CO** - Coriant  
**DH** - Dahua  
**DC** - DCN  
**DL** - Dell & Force10  
**DK** - D-Link

**DZ** - DZS(Dasan-Zhone)  
**EI** - ECI  
**EC** - EdgeCore  
**EW** - EdgeWare  
**EL** - Eltex  
**EM** - EMC2  
**EN** - Enterasys  
**ER** - Ericsson  
**EF** - EXFO  
**EX** - Extreme Networks  
**F5** - F5 Networks  
**FI** - Finisar  
**FO** - Fortinet  
**FU** - Fujitsu  
**H3** - H3C  
**HI** - Hirschmann  
**HU** - Huawei  
**IB** - IBM  
**IF** - Infinera  
**IN** - Intel  
**IX** - Ixia  
**JU** - Juniper Networks  
**KM** - KeyMile

**KY** - KyLand  
**LN** - Lenovo  
**ML** - Mellanox  
**ME** - Meraki (Cisco)  
**MT** - MikroTik  
**MO** - Moxa  
**MR** - MRV  
**NC** - NEC  
**NG** - Netgear  
**NK** - Nokia  
**NT** - Nortel  
**NS** - NSN  
**OR** - Oracle  
**PA** - Palo Alto Network  
**PL** - Planet  
**QC** - QCT(Quanta)  
**QN** - QNAP  
**RD** - RAD  
**RW** - RadWare  
**RC** - Raisecom  
**RK** - Ruckus  
**RU** - Ruijie Networks  
**SG** - Samsung

**SV** - Sandvine  
**SC** - Silicom  
**SF** - SolarFlare  
**SW** - Sonicwall  
**SM** - Supermicro  
**SY** - Synology  
**TC** - Telco Systems  
**TP** - TP-LINK  
**TN** - Trendnet  
**UN** - Ubiquiti Networks  
**VX** - VeEx  
**WG** - WatchGuard  
**WS** - Waystream  
**WT** - Westermo  
**ZT** - ZTE  
**ZX** - Zyxel  
**HP** - HP  
**AG** - Avago  
**OC** - Oclaro  
**EU** - Emulex  
**TM** - Transmode  
**AU** - HP Aruba  
**XX** - Other



## Warranty:

EDGE Optic's provides a limited **warranty for sixty (60) months** from Purchaser's receipt of the Equipment represented in this data sheet against defective design or workmanship. Warranty does not cover damage caused by improper deployment, misuse and accidents.

