

100G/200G/400G CFP2 DCO Pluggable Optical Module



Product Applications

- Used on the system's motherboard
- Up to 2000 km in MAN DWDM application

Product Features

- 100G CFP2-DCO coherent optical module operating up to 112.30 Gbps
- 200G CFP2-DCO coherent optical module operating up to 211.45 Gbps
- 400G CFP2-DCO coherent optical module operating up to 425 Gbps
- PM-QPSK (100G/200G) and PM-16QAM (200G / 400G) and PM-16QAM PS (200G) modulation formats
- CFP2 MSA Hardware Specification 1.0 with modifications compliant
- CFP MSA Management Interface Specification 2.2 with modifications compliant
- Maximum power consumption: 31 W

Optical Port Specifications

DCO-200G-C

Parameter	100G Mode Value	200G Mode Value
Network lane, modulation format	PM-QPSK	PM-16QAM
Optical channels	96	96
Grid spacing	50 GHz	50 GHz
Frequency range	191.3 to 196.05 THz	191.3 to 196.05 THz
Wavelength stability	±1.5 GHz	±1.5 GHz
Tx output power, default	-0.5 dBm	-0.5 dBm
Max. Tx output power	-0.5 dBm	-0.5 dBm
Min. Tx output power	-6.5 dBm	-6.5 dBm

Tx output power accuracy	±1.5 dBm	±1.5 dBm
Output power during tuning	< -35 dBm	< -35 dBm
CD tolerance	±40 000 ps/nm	±10 000 ps/nm
DGD tolerance	50 ps	12 ps
Input power range	0 to -18 dBm	0 to -18 dBm
OSNR tolerance (BOL)	12.5 dB (Rx optical power: -8 to -10 dBm)	23 dB (Rx optical power: -8 to -10 dBm)
Power consumption	Typical: 24 W Maximum: 27.5 W	Typical: 27.5 W Maximum: 31 W

DCO-200G-S

Parameter	100G Mode Value	200G Mode Value
Network lane, modulation format	PM-QPSK	PM-16QAM
Optical channels	96	96
Grid spacing	50 GHz	50 GHz
Frequency range	191.3 to 196.05 THz	191.3 to 196.05 THz
Wavelength stability	±1.5 GHz	±1.5 GHz
Tx output power, default	-0.5 dBm	-0.5 dBm
Max. Tx output power	-0.5 dBm	-0.5 dBm
Min. Tx output power	-6.5 dBm	-6.5 dBm
Tx output power accuracy	±1.5 dBm	±1.5 dBm
Output power during tuning	< -35 dBm	< -35 dBm
CD tolerance	±40 000 ps/nm	±40 000 ps/nm
DGD tolerance	50 ps	22 ps
Input power range	0 to -18 dBm	0 to -18 dBm
OSNR tolerance (BOL)	12.5 dB (Rx optical power: -8 to -10 dBm)	18.5dB (Rx optical power: -8 to -10 dBm)
Power consumption	Typical: 22 W Maximum: 24 W	Typical: 22 W Maximum: 24 W

DCO-400G-L

Parameter	200G Mode Value			400G Mode Value
	PM-QPSK	PM-16QAM	PM-16QAM PS	PM-16QAM
Network lane, modulation format	PM-QPSK	PM-16QAM	PM-16QAM PS	PM-16QAM
Optical channels	80	96	96	80
Grid spacing	75 GHz	50 GHz	50 GHz	75 GHz
Frequency range	190.7 to 196.65 THz	191.3 to 196.05 THz	191.3 to 196.05 THz	190.7 to 196.65 THz
Wavelength stability	±1.5 GHz	±1.5 GHz	±1.5 GHz	±1.5 GHz
Tx output power, default	-0.5 dBm	-2.5 dBm	-2.5 dBm	-2.5 dBm
Max. Tx output power	-0.5 dBm	-2.5 dBm	-2.5 dBm	-2.5 dBm
Min. Tx output power	-6.5 dBm	-6.5 dBm	-6.5 dBm	-6.5 dBm
Tx output power accuracy	±1.5 dB	±1.5 dBm	±1.5 dBm	±1.5 dBm
Output power during tuning	< -35 dBm	< -35 dBm	< -35 dBm	< -35 dBm
CD tolerance	±40 000 ps/nm	±40 000 ps/nm	±40 000 ps/nm	±15 000 ps/nm
DGD tolerance	22 ps	22 ps	22 ps	22 ps
Input power range	0 to -18 dBm	0 to -18 dBm	0 to -18 dBm	0 to -18 dBm
OSNR tolerance (BOL)	14.5 dB (Rx optical power: -8 to -10 dBm)	18.5 dB (Rx optical power: -8 to -10 dBm)	16.5 dB (Rx optical power: -8 to -10 dBm)	23 dB (Rx optical power: -8 to -10 dBm)
Power consumption	Typical: 26 W Maximum: 28 W	Typical: 22 W Maximum: 24 W	Typical: 22 W Maximum: 24 W	Typical: 26 W Maximum: 28 W

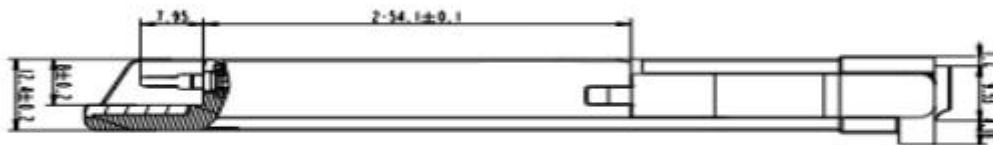
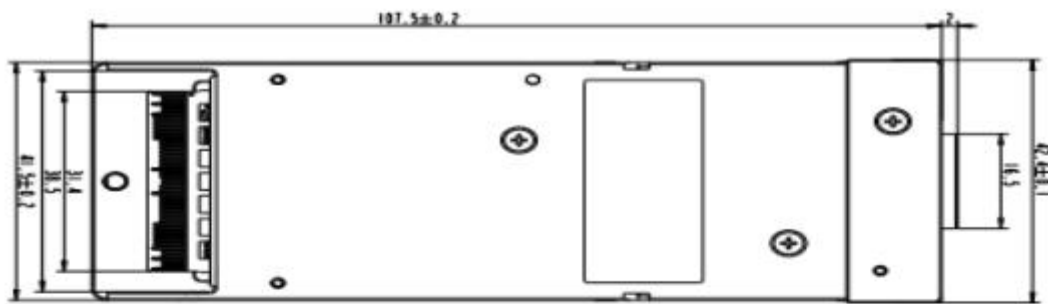
Operating Environment

Parameter		Min.	Max.	Unit
Storage temperature		- 40	85	°C
Operating case temperature		0	70	°C
Relative humidity,operating	Non condensing	5	85	
	Short term<96 hrs	5	95	

	Non condensing			%
ESD sensitivity(HBM)	High-speed pins ≥ 5 Gbps	-	1000	V
	Low-speed pins < 5 Gbps	-	2000	

Mechanical Design

Dimensions(L × W × H): 109.5 mm × 42.5 mm × 15.4 mm



Ordering Information

Module model	-	Description
DCO-200G-C		Supports 100G/200G rates, Supports100G PM-QPSK、 200G PM-16QAM
DCO-200G-S		Supports 100G/200G rates, Supports100G PM-QPSK、 200G PM-16QAM
DCO-400G-L		Supports 200G/400G rates, Supports 200G PM-QPSK、 200G PM-16QAM、 200G PM-16QAM PS、 400G PM-16QAM