

# 400G-QDD-DCO-ZR

Optical Transceivers



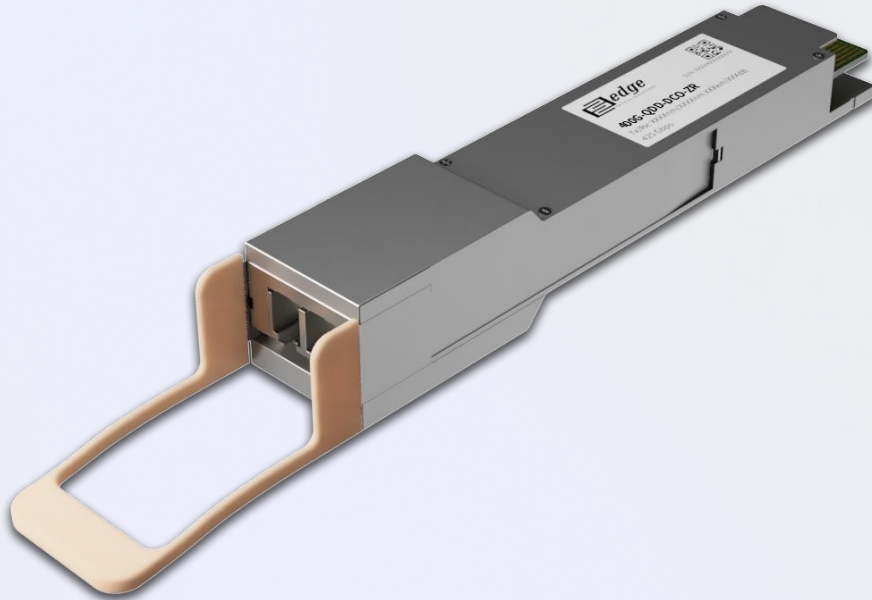
$\lambda = 1528-1567 \text{ nm}$



OS2 Fiber



Double LC



OB 10dB



Max 120 km



CFEC



$PC \leq 18W$

## Product description

400G-QDD-DCO-ZR is a 400G ZR Coherent QSFP-DD DCO Tunable Multi-Vendor MSA Compatible QSFP-DD (Quad Small Form-Factor Pluggable Double Density) Transceiver designed for operation over Double Single-Mode Fiber (SMF) optical cable. Module supports 400GAUI-8 host interface. On the transmission side module converts 8x 26.5625G PAM4 (Pulse-Amplitude Modulation) electrical input channels (each 53.125Gbps) into 4 Single Lambda 100G PAM4 optical signals. 400G-QDD-DCO-ZR uses top quality ITLA (Integrable Tunable Laser Assembly) tunable transmitter, operating at nominal C-band 75GHz ITU-T grid (1528 - 1567nm)/ Ch. 13-61 and 400Gb/s PIN photodiode array receiver. 400G-QDD-DCO-ZR supports DDM/DOM optical diagnostics and operates in Standard 0°-75°C temperature range and has Double LC interface. 400G-QDD-DCO-ZR transceiver is CE/RoHS certified and is compliant to 76pin QSFP-DD Multi Source Agreement (MSA), CMIS 5.0, OIF Implementation Agreement for Coherent CMIS, Rev 01.1, RoHS. We will be glad to know your requirements!

## Product Specification:

Media Type:	Single-Mode Fiber (SMF)
Connectors:	Double LC
TX Wavelength:	C-band 75GHz ITU-T grid (1528 - 1567nm)/ Ch. 13-61
RX Wavelength:	1528.77 nm-1567.13 nm
Minimum Optical Budget:	10 dB
Maximum Distance:	≤120 km
Supported Data Rate:	425 Gbps

# Product Specification:

Supported Applications:	400G Ethernet
DDM/DOM:	Supported
Forward Error Correction (FEC):	Supported CFEC
Host interface Modulation:	PAM4
Media Interface Modulation:	Single-Mode Fiber (SMF)
Transmitter Type:	ITLA
Tx Wavelength Bandwidth:	75 GHz (0.6 nm)
Average Launch Power (Min) Each Lane:	-10 dBm
Average Launch Power (Max) Each Lane:	-6 dBm
Extinction Ratio (Min):	3 dB
Receiver Type:	ICR
Rx Wavelength Bandwidth:	75 GHz (0.6 nm)
Rx Input Power Range (Min):	-12 dBm
Rx Input Power Range (Max):	0 dBm
Receiver Sensitivity:	-20 dBm
Avg Receiver Sensitivity(Min)Each Lane:	-8.4 dBm
Avg Receiver Sensitivity(Max)Each Lane:	4 dbm
Receiver Overload:	10 dBm
Temperature Range:	Standard 0°-75°C
Storage Temperature:	-40° to 85°C
Relative Humidity:	0 to 85%
Power Consumption:	≤ 18W
Power:	3.3V
Compliance:	400GAUI-8, 76pin QSFP-DD MSA, CMIS 5.0, OIF Implementation Agreement for Coherent CMIS, Rev 01.1, RoHS.

## Host Interfaces:

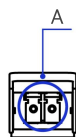
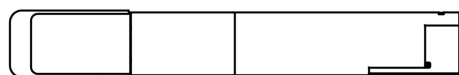
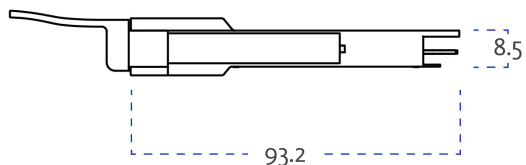
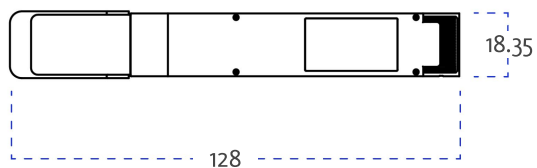
Host Interface	Application Data Rate	Lane Count	Lane Signaling Rate	Modulation
400GAUI-8	425.00 Gb/s	8	26.5625 GBaud (+ - 100 ppm)	PAM4

## Media Interface:

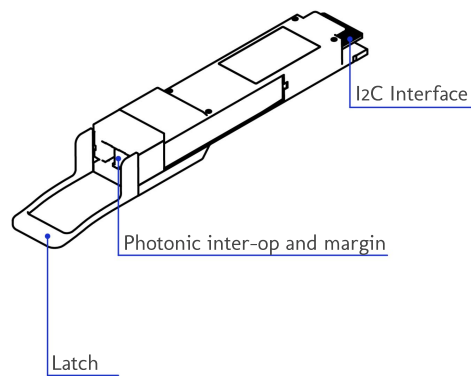
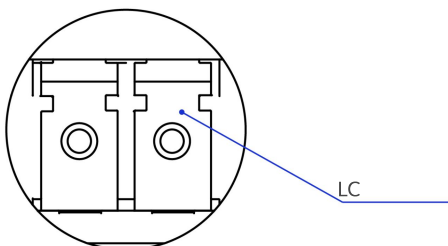
Application Bit Rate	Baud Rate	Modulation	FEC
478.75 Gb/s	59.84375GBd	DP-16QAM	CFEC

# Mechanical Dimensions

\*The dimensions are given in millimetres [mm]



A (5:1)



## 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.

