

# CFP Transceivers – 100 Gbps LR4, ER4

## Description

OPTOKON CFP transceivers is designed for high speed communication applications that requiring rates of from 103.125 to 111.81 Gbps. The transceiver converts 4 inputs channel of 25.78 to 27.95 Gb/s electrical data to 4 CWDM optical signals, and multiplexes them into a single channel through an industry standard LC connector.



## Features

- Compliant with 100GBASE-LR4 and 100GBASE-ER4
- Support line rates from 103.125 Gbps to 111.81 Gbps
- Integrated LAN WDM TOSA/ROSA for up to 10 km (LR4) and up to 40 km (ER4) reach over SMF
- Duplex LC optical receptacle
- Single 3.3 V power supply
- Power dissipation < 12W (LR4) and < 9W (ER4)
- CWDM - 1296nm, 1300nm, 1305nm and 1309nm

## Applications

- Data Center and 100G Ethernet
- ITU-T OTU4

## Safety and regulatory compliance and standards

- Compliant to IEEE 802.3ba
- Compliant to CFP MSA CFP Hardware Specification
- Compliant to CFP MSA CFP Management Interface Specification



## Optical characteristics

### Transmitter

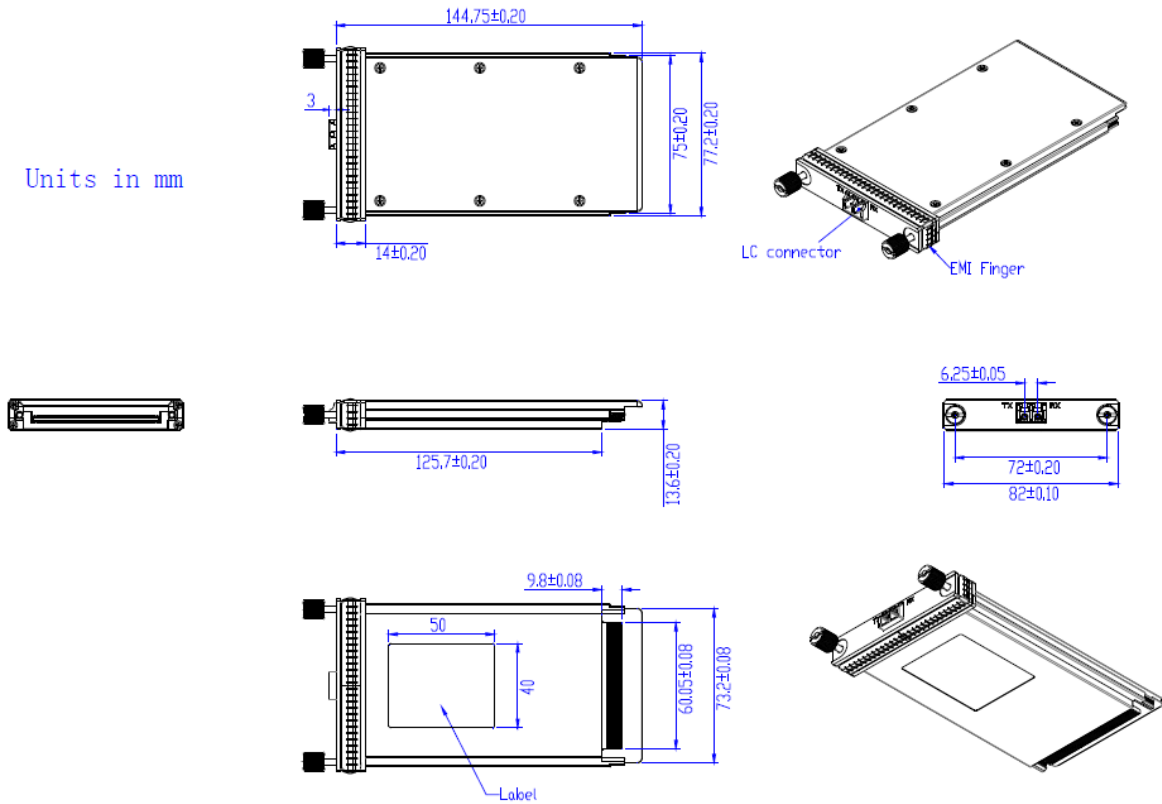
Parameter:	Min	Typ.	Max	Unit
Signaling rate, each lane		25.78125		Gbps
Lane wavelength (range)	1294.53	1295.56	1296.59	nm
	1299.02	1300.05	1301.09	nm
	1303.54	1304.58	1305.63	nm
	1308.09	1309.14	1310.19	Nm
Total launch power			10.5 (LR4) / 8.9 (ER4)	dBm
Average launch power, each lane	-4.3 (LR4) / -2.9 (ER4)		4.5 (LR4) / 2.9 (ER4)	dBm
Average launch power of OFF transmitter, each lane			-30	dBm

### Receiver

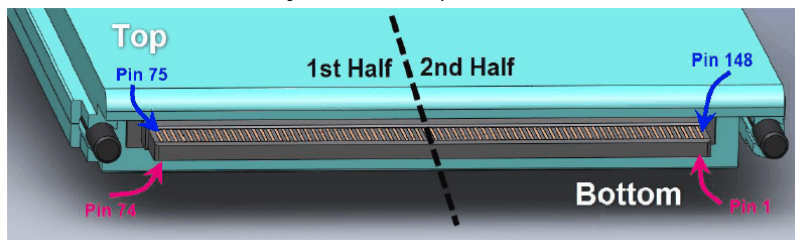
Parameter:	Min	Typ.	Max	Unit
Average receive power, each lane	-10.6 (LR4) / -20.9 (ER4)		4.5	dBm
Receive power, each lane (OMA)			4.5	dBm
Receiver Sensitivity (OMA), each lane			-6.8 (LR4) / -21.4 (ER4)	dBm

## Dimension

Units in mm



## CFP Pin map orientation



## Ordering code

Code	Description
S100G-CFP-LR4-10-D-XX	100 Gbps, CFP housing up to 10 km 4x 25 Gbps, LC connector.
S100G-CFP-ER4-40-D-XX	100 Gbps, CFP housing up to 40 km 4x 25 Gbps, LC connector