

**DATASHEET 5.1**

# SO-CFP4-LR4

**CFP4, 100GBASE-LR4, OTU4, 1310nm, SM, DDM, 6.3dB, 10km**

## OVERVIEW

The SO-CFP4-LR4 is a CFP4 (C Form-factor Pluggable) transceiver for 100 Gbps Ethernet (100GBASE-LR4) and OTN (OTU4) applications. It is intended for use in inter- and intra-connect applications within and between data centers between switches, routers, storage equipment etc. The optical performance is in accordance with the 100GBASE-LR standard, i.e. for optical distances up to 10km over a SingleMode (SM) fiber.

SO-CFP4-LR4 uses four channels/lanes @ 25.78 Gbps and 27.95 Gbps to transport an Ethernet and OTN signal, respectively.

## TECHNICAL DATA

Parameter	Value
Technology	Grey CFP4
Transmission media	SM (2x LC)
Typical reach	10 km
Nominal wavelengths	Lane 1: 1295.56 nm Lane 2: 1300.05 nm Lane 3: 1304.58 nm Lane 4: 1309.14 nm
Interface standards	100GBASE-LR4 OTU4 4I1-9D1F
Bit rate range	103.12 / 111.81 Gbps <sup>1)</sup> 25.78 / 27.95 Gbps <sup>2)</sup>
Protocol support	100GbE OTU4
Power budget	0 - 6.3 dB (100GbE/OTU4)
Optical path penalty	2.2dB(100GbE) 1.5dB (OTU4)
Power consumption	< 6W
Temperature range	-0°C to +70°C
Storage temperature	-40°C to +85°C

Transmitter data:	
Output power, total	Max +10.5dBm <sup>3)</sup> (100GbE) Max +8.9dBm <sup>3)</sup> (OTU4)
Output power, per lane 100GbE	Min: -4.3dBm <sup>3)</sup> Max: +4.5dBm <sup>3)</sup>
Output power, per lane OTU4	Min: -2.5dBm <sup>3)</sup> Max: +2.9dBm <sup>3)</sup>
Transmit wavelength	1294.53 – 1296.59nm 1299.02 – 1301.09nm 1303.54 – 1305.63nm 1308.09 – 1310.19nm

<sup>1)</sup> Aggregated line rate (100GbE / OTU4)

<sup>2)</sup> Per lane

<sup>3)</sup> Average power

<sup>4)</sup> Specified at BER 1x10<sup>-12</sup>

<sup>5)</sup> Specified at pre-FEC BER 1x10<sup>-5</sup>