

# CFP4-100G-LR4

## 100G Ethernet LR4 Transceiver

### DESCRIPTION

The CFP4 LR4 transceiver is a 100 Gbit/s pluggable module for bi-directional serial optical data communications such as 100GBASE Ethernet. The transceiver operates with four parallel data streams of 25.78 Gbps to 27.95 Gbps in order to provide an aggregated signaling rate from 103.125 Gbps to 111.81 Gbps. The four lanes are launched with center wavelengths of 1296 nm, 1300 nm, 1305 nm and 1309 nm and multiplexed onto singlemode fiber. On the receive side, the four lanes of optical data streams are de-multiplexed by the transceiver and retimed.

The module is compliant with IEEE 802.3-2012 Clause 88 100GBASE-LR4 and ITU-T G.959.1-2012-02 electrical specifications. The MDIO management interface complies with IEEE 802.3-2012 Clause 45 standard. The transceiver complies with CFP4 MSA Hardware Specification Rev. 1.1, CFP4 MSA Management Interface Specification Rev. 2.4, and OIF CEI-28G-VSR standards.

### APPLICATIONS

- 100GBASE-LR4

### FEATURES

- Up to 10 km transmission on singlemode fiber
- Hot-Pluggable CFP4 footprint
- Duplex LC Optical interface
- CFP4 MSA compatible
- Digital Diagnostics Monitoring interface
- Single 3.3 V power supply
- Power dissipation < 6 W
- RoHS-6 compliant (lead-free)
- Case operating temperature: 0°C to 70°C



**FIBERWORKS**

### LASER SAFETY

This transceiver is a Class 1 laser product. It complies with IEC-60825 and FDA 21 CFR 1040.10 and 1040.11. The transceiver must be operated within the specified temperature and voltage limits. The optical ports of the module need to be terminated with an optical connector or a dust plug.

### OPTICAL PARAMETERS

Part no.	SM/MM Fiber	Wavelength [nm]	Opt. Output Power [dBm]	Opt. Receiver Sensitivity [dBm]	Power Budget [dB]
CFP4-100G-LR4	SM	1296-1309 nm	-4.3 to 4.5	-10.6 to 4.5	6.3

Optical power values are per channel

### ORDERING INFORMATION

Part no.	Description
CFP4-100G-LR4	CFP4, 100Gbase-LR4, 4x25.8Gbps, 1310nm, DDM, 10km, 6.3dB, SM