

**PRE-CFP-LR4, PRE-CFPM-LR4**  
CFP, 1310nm, SMF, 10km, 100Gbps & 112Gbps



**Product Features:**

- EML Transmitters
- PIN Receivers
- SMF Transmission Medium
- LC-UPC Connector Type
- Digital Diagnostics Monitoring (DDM)



**Product Applications:**

- 100G Ethernet
- OTN Transport

**General Specifications**

Parameter	Symbol	Min	Typ	Max	Unit
Case Operating Temperature (Commercial)	$T_{op}$	0	-	70	°C
Power Consumption	$P_w$	-	-	12	W
Power Supply Current	$I_{cc}$	-	-	3600	mA
Power Supply Voltage	$V_{cc}$	3.2	3.3	3.4	V
Storage Humidity	$H_s$	5	-	95	%
Storage Temperature	$T_s$	-40	-	85	°C
Transmission Distance	TD	-	-	10	km
Data Rate (Total)	$DR_T$	103.125	-	111.81	Gbps
Data Rate (Per Lane)	$DR_{lane}$	25.78125 ± 100 ppm	-	27.95249 ± 20 ppm	GBd

**Optical Characteristics: Transmitter**

Parameter	Symbol	Min	Typ	Max	Unit
Center Wavelength 1	$\lambda_1$	1294.53	1295.56	1296.59	nm
Center Wavelength 2	$\lambda_2$	1299.02	1300.05	1301.09	nm
Center Wavelength 3	$\lambda_3$	1303.54	1304.58	1305.63	nm
Center Wavelength 4	$\lambda_4$	1308.09	1309.14	1310.19	nm
Transmit Power per lane (100GE)	$P_{OUT}$	-4.3	-	4.5	dBm
Transmit Power per lane (OTU4)	$P_{OUT}$	-2.5	-	2.9	dBm

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Side Mode Suppression Ratio	SMSR	30	-	-	dB
Dispersion Penalty per lane	DP	-	-	2.2	dB
Extinction Ratio (100GE)	ER	4	-	-	dB
Extinction Ratio (OTU4)	ER	7	-	-	dB
Relative Intensity Noise	RIN	-	-	-130	dB/Hz
Transmitter OFF Output Power per lane	P <sub>OFF</sub>	-	-	-30	dBm

**Optical Characteristics: Receiver**

Parameter	Symbol	Min	Typ	Max	Unit
Receiver Wavelength 1	$\lambda_1$	1294.53	1295.56	1296.59	nm
Receiver Wavelength 2	$\lambda_2$	1299.02	1300.05	1301.09	nm
Receiver Wavelength 3	$\lambda_3$	1303.54	1304.58	1305.63	nm
Receiver Wavelength 4	$\lambda_4$	1308.09	1309.14	1310.19	nm
Damage Threshold per lane	P <sub>D</sub>	5.5	-	-	dBm
Receiver Sensitivity per lane (100GE)	R	-	-	-8.6	dBm
Receiver Sensitivity per lane (OTU4)	R	-	-	-10.6	dBm
LOS Assert	LOS <sub>A</sub>	-	-18	-	dBm
LOS De-Assert	LOS <sub>D</sub>	-	-15	-	dBm
LOS Hysteresis	LOS <sub>H</sub>	0.5	-	-	dB

**Product Ordering Information**

Part Number	Description
PRE-CFP-LR4	CFP, 1310nm, SMF, 10km, 100Gbps
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