

800G OSFP224 SMF OS2 MPO 1310nm

Variants

100M - OM4 150M-OM4

Details

Product Overview

The **800G OSFP224 DR4, 1310 nm, MPO-12 / MPO** is a hot-pluggable optical transceiver module designed for high-speed data centers, cloud interconnects, and backbone links. It operates over **single-mode fiber (OS2 / G.652)** and supports up to **500 m** reach.

It uses **4 electrical lanes × 200 G (PAM4)** to realize the 800 G aggregate bit rate. It supports Digital Diagnostics Monitoring (DDM / DOM), is compliant with OSFP MSA, CMIS, and IEEE standards.

Key Specifications (Typical / Guaranteed)

Parameter	Symbol / Interface	Min / Typical / Max	Unit	Notes / Conditions
Data Rate	Aggregate	800	Gbps	4 × 200 G (PAM4)
Wavelength per lane	λC	1304.5 – 1317.5	nm	1310 nm nominal
Reach / Distance	–	up to 500	m	over SMF (OS2) with MPO-12 / MPO interface
Connector	–	MPO-12 / APC (or MPO family)	–	Module side connector interface
Transmitter	–	EML (Electro-absorption Laser)	–	High speed source
Receiver	–	PIN photodiode	–	–
Launch Power per lane	P_O	–4.6 to +4	dBm	typical range
Receiver Sensitivity (OMA)	–	~ –3.4 dBm	dBm	for BER target, etc.
Extinction Ratio	ER	≥ 3.5	dB	–

Power Consumption	P_DISS	? 18	W	typical ?18 W
Voltage Supply	VCC	3.135 to 3.465	V	typical 3.3 V
Operating Case Temperature	Tcase	0 to +70	°C	–
Storage Temperature	TSTG	–40 to +85	°C	–
Relative Humidity	RH	5 to 95 (non-condensing)	%	–
Standards / Compliance	–	IEEE 802.3dj DR4, OSFP MSA, CMIS Rev5.x	–	–
Digital Diagnostic Monitoring	–	temperature, voltage, TX bias, TX power, RX power	–	± tolerances, 2-wire I ² C interface included