

800G OSFP224 SMF OS2 MPO 1310nm

Variants

100M - OM4 150M-OM4

Details

800G OSFP224 DR4, 1310 nm, MPO-12 / MPO

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 transmission distance up to 500 m.

It uses 4 electrical lanes x 200G PAM4 to achieve an aggregate 800G bit rate. The module supports Digital Diagnostics Monitoring (DDM / DOM) and complies with OSFP MSA, CMIS, and IEEE standards.

Key Specifications

Parameter	Symbol / Interface	Min / Typical / Max	Unit	Notes / Conditions
Data Rate	Aggregate	800	Gbps	4 x 200G PAM4
Wavelength per Lane	?C	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 optical connector

Parameter	Symbol / Interface	Min / Typical / Max	Unit	Notes / Conditions
Transmitter	–	EML	–	Electro-absorption laser
Receiver	–	PIN Photodiode	–	–
Launch Power per Lane	P_O	–4.6 to +4	dBm	Typical range
Receiver Sensitivity (OMA)	–	~ –3.4	dBm	For BER target
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 Rev 5.x	–	–
Digital Diagnostic Monitoring	–	Temperature, Voltage, TX Bias, TX Power, RX Power	–	2-wire I ² C interface included