800G OSFP112DD SMF (OS2) MPO 1310 nm

Variants

1km 500M 2km

Details

800G OSFP112-DD | SMF (OS2) | MPO | 1310 nm

Available distances: 500 m • 1 km • 2 km

General Overview

? OSFP112 Dual-Density hot-pluggable optical module
? Parallel 8 × 100 Gbps lanes based on PAM4 (106.25 Gb/s each)
? Operates in the 1310 nm O-band for short to mid-reach links
? MPO-16 (APC) interface for eight Tx + eight Rx fibers
? Supports IEEE 802.3df / CMIS 5.x management
? Optimized for low latency AI/ML and DCI interconnects

Key Highlights

• Hot-pluggable OSFP form factor with integrated heatsink
• Electrical interface: 8 × CAUI-112 (100 ? AC coupled)
• Supply voltage: single 3.3 V rail (± 5 %)
• Power consumption: ? 14–16 W (variant-dependent)
• Operating temperature: 0 °C to 70 °C (case)
• Compliant with RoHS 2.0 and IEC laser safety Class 1

Optical Performance

? **Transmission wavelength:** 1310 nm nominal
? **Modulation format:** PAM4 53 GBd per lane
? **Tx OMA-outer:** –2.9 to +4.0 dBm (typ.)
? **Receiver sensitivity:** –5.9 dBm (DR8) / –4.5 dBm (FR8)

? **Tx dispersion penalty:** ? 3.5 dB
? **Extinction ratio:** ? 3.5 dB

Distance Variants

Variant	Optical Type	Fiber Type	Reach	Use Case
DR8	1310 nm Parallel SMF	OS2	500 m	Rack-to-rack / Row links
XDR8	Extended DR8	OS2	1 km	Building or campus links
FR8	1310 nm Parallel SMF	OS2	2 km	Aggregation / Metro DC links