

COLORZ® II 400ZR+ QSFP-DD

Part No.

IN-Q3JX1-TC

Product Type

ColorZ II (400ZR+)

Market Segments

Between Data Centers

Applications

Data Center Interconnects (DCI)

Metro DWDM up to 400 km – IPoDWDM
Point-to-Point links**Features**

- Compatible with the QSFP-DD MSA
- Compliant with the OIF 400ZR Implementation Agreement (OIF-400ZR-01.0 IA for 400ZR, March 10, 2020)
- Compatible with Common Management Interface Specification (CMIS) Rev. 5.0 and OIF Coherent Module Management Interface Specification
- 400 Gbps with single optical carrier (60 Gbaud, 16QAM)
- Transmission of 400GbE signals per wavelength
- Fully C-Band tunable
- DWDM wavelength spacing options
- Integrated, Soft Decision LDPC Forward Error Correction (SD-FEC) encode/decode
- Host and network loopback functionality
- Supports IEEE 802.3bs 400GAUI-8 and 4x100GAUI-2 host interface
- Two-wire management interface (TWI) with extended digital diagnostic monitoring and alarm functions

Description

The COLORZ® II 400ZR+ QSFP-DD is a pluggable Digital Coherent Optics (DCO) transceiver. This DCO can be plugged into compatible switches and routers for coherent transmission of 400GbE signals over DWDM links.

The transmitter is tunable over the ITU C-Band (75 GHz grid or 100 GHz grid). The COLORZ II 400ZR+ QSFP-DD includes a narrow linewidth tunable laser, Silicon Photonics Modulator ICR, and a DSP.

Optical signals are transmitted and received from the module by standard duplex SMF and LC receptacles.

The client/electrical interface is compatible with IEEE P802.3bs 8 lane 56G PAM-4, as used for “gray” datacenter optical transceivers, for example 400GBASE-DR4. COLORZ II 400ZR+ modules are mechanically and electrically compatible with the QSFP-DD MSA and utilize a 76-Pad electrical connector.

The COLORZ II 400ZR+ QSFP-DD utilizes 7 nm coherent DSP technology, including its low power SD-FEC as well as innovative silicon photonics, driver, and TIA technology to provide coherent transmission performance previously only available on lower density, higher power, and higher cost systems.