

400GBASE ZR QSFP-DD Hyper Silicon ™ Optical Transceiver

The Hyper photonix 400G QSFP-DD ZR Transceiver is a high performance, cost effective module for optical data communication applications to 400G. The 400G QSFP-DD ZR is designed to 400G 120Km DCI DWDM applications without inline chromatic dispersion compensation.

The 400G QSFP-DD ZR is a C-Band optical frequency tunable coherent optical module, combines 7nm coherent DSP ASIC functionality with best in class ultra-narrow line-width tunable lasers, high speed modulators and high responsively coherent receivers to deliver high performance at 400G DP-16QAM modulation formats. With VOA inside the TX optical path, the output optical power is -13dBm~-9dBm Configurable.

The 400G QSFP-DD ZR coherent transceiver is compliant with the OIF QSFP-DD MSA. Digital diagnostics functions are available via an I2C interface as specified by the QSFP-DD MSA. Mechanical dimensions, connectors and footprint conform to QSFP-DD MSA. The module is $18.35 \text{ mm} \times 93.26 \text{ mm} \times 8.50 \text{ mm}$ in size and hot pluggable by 76 PIN PAD and host connector.

Features

- QSFP-DD MSA compliant type 2B package
- Up to120Km transmission distance
- Client signal 400GbE or 4x100GbE
- Line Modulation format 400G DP-16QAM
- C-band tunable, supports 100/75GHz grid spacing,
- support 0. 1GHz fine turning
- TX power -13dBm~-9dBm tunable
- Support ingress LF hold-off time configure
- Support hitless firmware upgrade
- Compact size (18.35 mm × 93.26 mm × 8.50 mm)
- Duplex LC Receptacle
- Operating case temperature: 0°C to 75°C
- Maximum power consumption 18W (400GbE)
- Single 3.3 V power supply
- RoHS 2 compliant

Applications

- Edge DCI 400GBASE-ZR application
- 30~40Km unamplified 400GbE P2P link
- Up to 120Km P2P link with amplification





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Compliance

- OIF-400ZR-02.0
- OIF-CMIS-05.2
- IA OIF-C-CMIS-01.2
- QSFP-DD-Hardware-Rev6.3
- IEEE Std 802.3-201