400GBASE ZR+ HO QSFP-DD
Hyper Silicon ™ Optical Transceiver

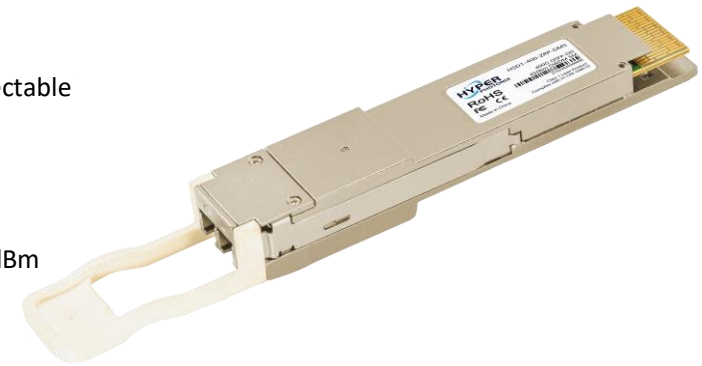
The Hyper Photonix 400G QSFP-DD ZR+ HO (High Output) transceiver is a high performance, high output power, cost effective module for optical data communication applications from 100G to 400G. The 400G QSFP-DD ZR+ HO is designed for 100G/200G long haul and 300G/400G Metro IP over DWDM applications without inline chromatic dispersion compensation.

The 400G QSFP-DD ZR+ HO 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 silicon photonics coherent modulators and high responsivity coherent receivers to deliver high performance at 100G DP-QPSK, 200G DP-QPSK, 300G DP-8QAM, and 400G DP-16QAM modulation formats. With integrated EDFA and VOA the TX output optical power is adjustable from -10dBm to +1dBm over the C-band.

The 400G QSFP-DD ZR+ HO coherent transceiver is compliant with the OIF 400ZR and OpenZR+ standards. Digital diagnostic functions are available via I2C interface as specified by the QSFP-DD MSA. Mechanical dimensions, connectors, and footprint conform to QSFP-DD MSA.

Features

- Compliant with QSFP-DD MSA, Type 2B package
- Compliant with OpenZR+ MSA and OIF 400ZR MSA supporting OFEC and CFEC
- Line rates supported: 100G/200G/300G/400G user selectable
- Client rates supported: 1/2/3/4x100GbE or 1x400GbE
- C-band tunable wavelength, supports 100/75/50GHz grid spacing and 0.1GHz fine tuning
- Integrated EDFA, max TX power +1dBm over C-band
- Integrated TX VOA, adjustable output power -10 to +1dBm
- Supports configurable ingress LF hold-off time
- Supports hitless firmware upgrade
- Duplex LC connector
- Operating case temperature: 0°C to 70°C
- Single 3.3 V power supply
- Maximum power consumption 22.5W (at 400GbE)
- RoHS 2 compliant



400GBASE ZR+ HO QSFP-DD
Hyper Silicon ™ Optical Transceiver

Applications

- Edge DCI with extended reach or with OLP protection
- IP Over Metro or Long Haul DWDM links to > 450km

Compliance

- Open ZR+ MSA 2.0 and OIF-400ZR-02.0
- OIF-CMIS-05.2
- IA OIF-C-CMIS-01.2
- QSFP-DD-Hardware-Rev6.3
- IEEE Std 802.3-2018