The Hyper Photonix 400G QSFP-DD ZR+ transceiver is a high-performance, cost-effective module for optical data communication applications from 100G to 400G. The 400G QSFP-DD ZR+ is designed to 100G/200G long haul and 300G/400G Metro IP over 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 100G DP-QPSK / 200G DP-QPSK / 300G DP-8QAM / 400G DP-16QAM modulation format. With one VOA inside the TX optical path the out output optical power has 4dB attenuation window.

The 400G QSFP-DD ZR+ coherent transceiver 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 mm x 93.26 mm x 8.50 mm in size and hot pluggable by 76 PIN PAD and host connector.

Features
- Compliant with QSFP-DD MSA, Type 2B package
- Compliant with Open ZR+ MSA and OIF 400ZR MSA, support OFEC and CFEC FEC
- Line rate 100G/200G/300G/400G
- Client rate 1/2/3/4x100GbE or 1x400GbE
- C-band tunable, supports 100/75/50GHz grid spacing, support 0. 1GHz fine turning
- TX VOA inside, with 4dB attenuation window
- Support ingress LF hold-off time configure
- Support hitless firmware upgrade
- Compact size (18.35 mm x 93.26 mm x 8.50 mm)
- Duplex LC connector
- Operating case temperature: 0℃ to 75°C
- Single 3.3 V power supply
- Typicl power consumption 21W (400GbE), maximum power consumption 22.5W(400GbE)
- RoHS 2 compliant
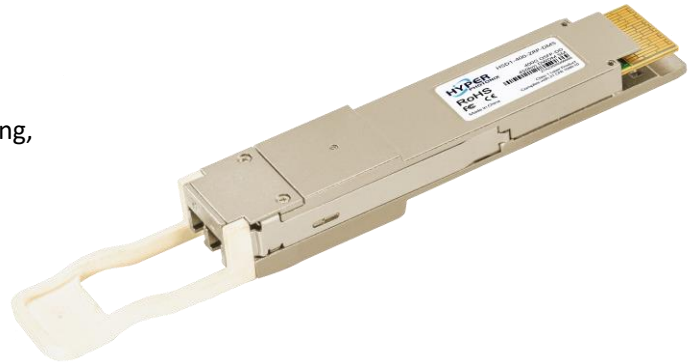
Applications

- Edge DCI with extended Reach or with OLP protection
- IP Over Metro or Long Haul DWDM

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