

The Hyper Photonix HSD1-400-LR-C4S is a high performance, cost effective module for optical data communication applications to 400G and transmission distance up to 10km on SM fiber. The transceiver consists of two sections: The transmitter section incorporates a quad channel EML Laser, a quad channel driver and a DSP. The receiver section consists of a quad channel PIN photodiode integrated with a quad channel transimpedance preamplifier (TIA) and sharing DSP with transmitter. The module is hot pluggable with a 76-pin connector. The high-speed electrical interface is base on low voltage logic, with nominal 100 Ohms differential impedance and AC coupled in the module.

### Features

- Up to 10KM transmission distance
- Signaling rate per lane, 53.125GBd
- EML with TEC and PIN receiver
- Modulation format ,PAM4
- 400GAUI-8 electrical interface
- 2-wire interface for integrated Digital Diagnostic monitoring
- QSFP-DD MSA package with single LC connectors
- Hot pluggable
- Very low EMI and excellent ESD protection
- +3.3V power supply
- Power consumption less than 12W
- Operating case temperature: 0~70°C



### Applications

- 400G LR4 applications

### Specifications

Part Number	HSD1-400-LR-C4S
Data Rate	425Gbps
Supply Voltage	3.3V
Power Consumption	≤ 12W
Wavelength	1310nm
Optical Connector	Dual MPO-12/APC
Transmitter	DFB
Receiver	PIN
Case Temperature	0°C to 70°C
Reach	500m over SMF