

# 400G-QSFP-DD-100

Optical Transceivers



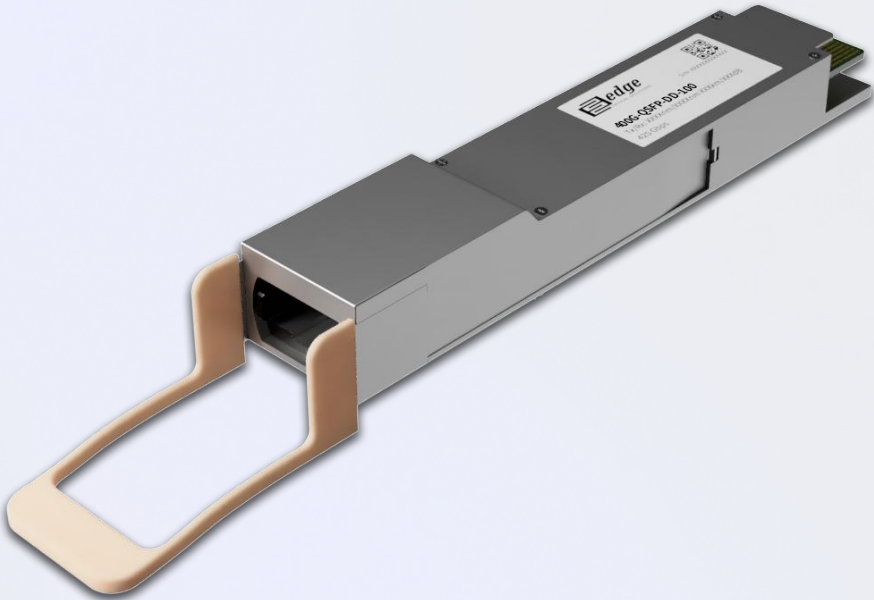
$\lambda = 850 \text{ nm}$



Fiber Type: OM5



MTP/MPO-16



OB 1.9dB



Max 100 m



FEC



$PC \leq 8W$

## Product description

400G-QSFP-DD-100 is a 400GBASE-SR8 Multi-Vendor MSA Compatible QSFP-DD (Quad Small Form-Factor Pluggable – Double Density) Transceiver designed for operation over Multi-Mode Fiber (MMF) optical cable. On the transmission side module converts 8x 50G PAM4 (Pulse-Amplitude Modulation) electrical input channels (each 53.125Gbps) into 8x independent PAM4 optical signal with baud rate of 53.125 Gbps. Module has minimum guaranteed optical budget of 1.9 dB, which in most cases is enough to reach 100 m distance over OM5 multi-mode fiber. 400G-QSFP-DD-100 uses top quality VCSEL (Vertical Cavity Surface Emitting Laser) (850 nm) transmitter and 400Gb/s PIN photodiode receiver. 400G-QSFP-DD-100 400GBASE-SR8 supports DDM/DOM optical diagnostics that provide real-time diagnostic information about the present operating conditions. 400G-QSFP-DD-100 operates in Standard 0°-70°C temperature range and has MTP/MPO-16 interface. 400G-QSFP-DD-100 400GBASE-SR8 QSFP-DD transceiver is CE/RoHS certified and is compliant to QSFP-DD Multi Source Agreement (MSA), CMIS 4.0, IEEE 802.3bs 400 Gbps specification, IEEE802.3cm and IEEE 802.3cd. We will be glad to know your requirements!

## Product Specification:

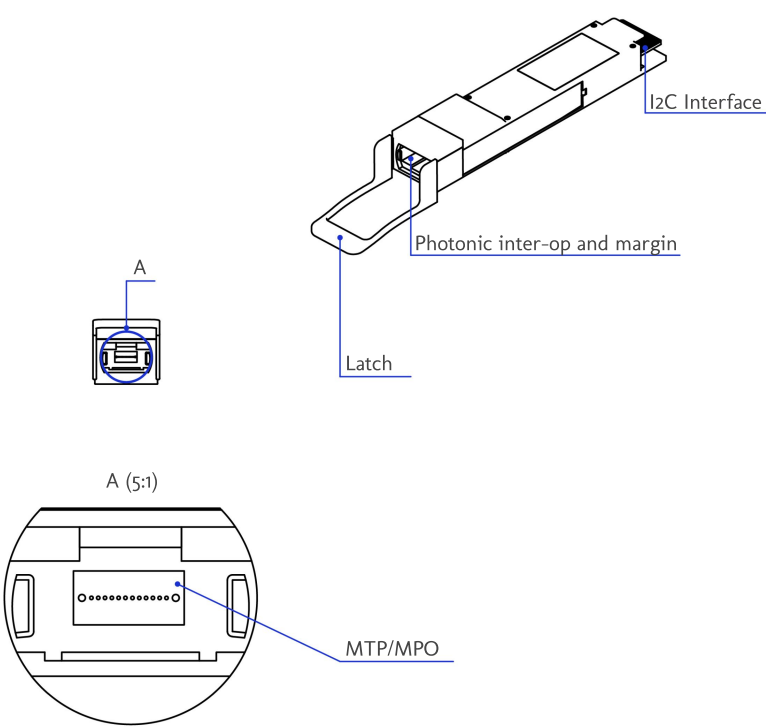
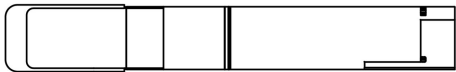
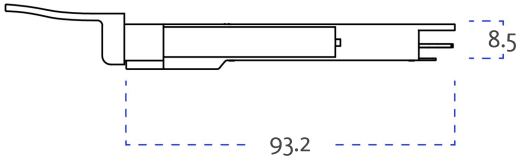
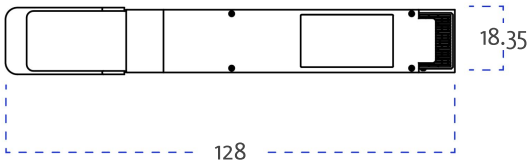
|                         |                        |
|-------------------------|------------------------|
| Media Type:             | Multi-Mode Fiber (MMF) |
| Connectors:             | MTP/MPO                |
| TX Wavelength:          | 850 nm                 |
| RX Wavelength:          | 850 nm                 |
| Minimum Optical Budget: | 1.9 dB                 |
| Maximum Distance:       | 100 m                  |
| Supported Data Rate:    | 425 Gbps               |

Product Specification:

|   |  |
|---|--|
| Supported Applications:                 | 400G Ethernet  |
| DDM/DOM:                                | Supported  |
| Forward Error Correction (FEC):         | Host FEC Supported   |
| Transmitter Type:                       | VSCEL Laser  |
| Tx Wavelength Bandwidth:                | 20 nm  |
| Average Launch Power (Min) Each Lane:   | -6.5 dBm   |
| Average Launch Power (Max) Each Lane:   | 4 dBm  |
| Extinction Ratio (Min):                 | 3 dB   |
| Receiver Type:                          | PIN photodiode   |
| Rx Wavelength Bandwidth:                | 20 nm  |
| Avg Receiver Sensitivity(Min)Each Lane: | -8.4 dBm   |
| Avg Receiver Sensitivity(Max)Each Lane: | 4 dbm  |
| Receiver Overload:                      | 5 dBm  |
| Temperature Range:                      | Standard 0°-70°C   |
| Storage Temperature:                    | -40° to 85°C   |
| Relative Humidity:                      | 0 to 85%   |
| Power Consumption:                      | ≤ 8W   |
| Power:                                  | 3.3V   |
| Compliance:                             | 400GBASE-SR8, IEC60825-1 Laser Safety Compliant, IEEE 802.3bs, CMIS 4.0, QSFP-DD MSA, RoHS-6, CE |

Mechanical Dimensions

\*The dimensions are given in millimetres [mm]



## Warranty

EDGE Optic's provides a limited warranty for **sixty (60) months** from Purchaser's receipt of the Equipment represented in this data sheet against defective design or workmanship.



EDGE Technologies Ltd.  
Plienciema Street 33, Marupe,  
Latvia, LV-2167

+371 22084457  
[www.edgeoptic.com](http://www.edgeoptic.com)  
[sales@edgeoptic.com](mailto:sales@edgeoptic.com)

