

400G-QSFP-DD-12

Optical Transceivers



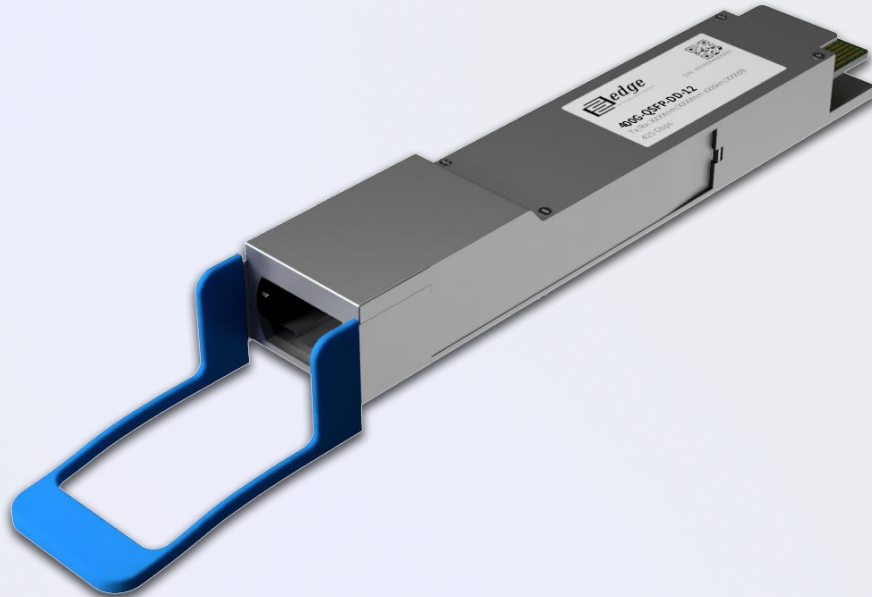
$\lambda = 4 \times 1310 \text{ nm PSM4}$



OS2 Fiber



MTP/MPO-12



OB 9dB



Max 10 km



FEC



$PC \leq 12W$

Product description

400G-QSFP-DD-12 is a 400GBASE-DR4++ Multi-Vendor MSA Compatible QSFP-DD (Quad Small Form-Factor Pluggable – Double Density) Transceiver designed for operation over Double Fiber Single-Mode Fiber (SMF) optical cable. On the transmission side module converts 8x 50G 400GAUI-8 PAM4 (Pulse-Amplitude Modulation) electrical input channels (each 53.125Gbps) into 4 Single Lambda 100G PAM4 LAN-WDM optical signals. Reversely the opposite is done on the receiving side, module converts 4 Single Lambda 100G PAM4 optical signals into 8x 50G 400GAUI-8 electrical inputs. Module has minimum guaranteed optical budget of 9 dB, which in most cases is enough to reach 500 meters with host FEC and OS2 single-mode fiber MTP/MPO-12 400G-QSFP-DD-12 uses top quality Quad channel EML driver and 4 WDM EML lasers together with an optical multiplexer (4 WDM lines at 1311nm) transmitter and 400Gb/s PID array receiver. 400G-QSFP-DD-12 400GBASE- DR4++ supports DDM/DOM optical diagnostics that provide real-time diagnostic information about the present operating conditions. 400G-QSFP-DD-12 operates in Standard 0°-70°C temperature range and has MTP/MPO-12 interface. 400G-QSFP-DD-12 400GBASE-DR4++ QSFP-DD transceiver is CE/RoHS certified and is compliant with product safety standards and QSFP-DD Multi Source Agreement (MSA), IEEE 802.3bs 400 Gbps specification. We will be glad to know your requirements!

Product Specification:

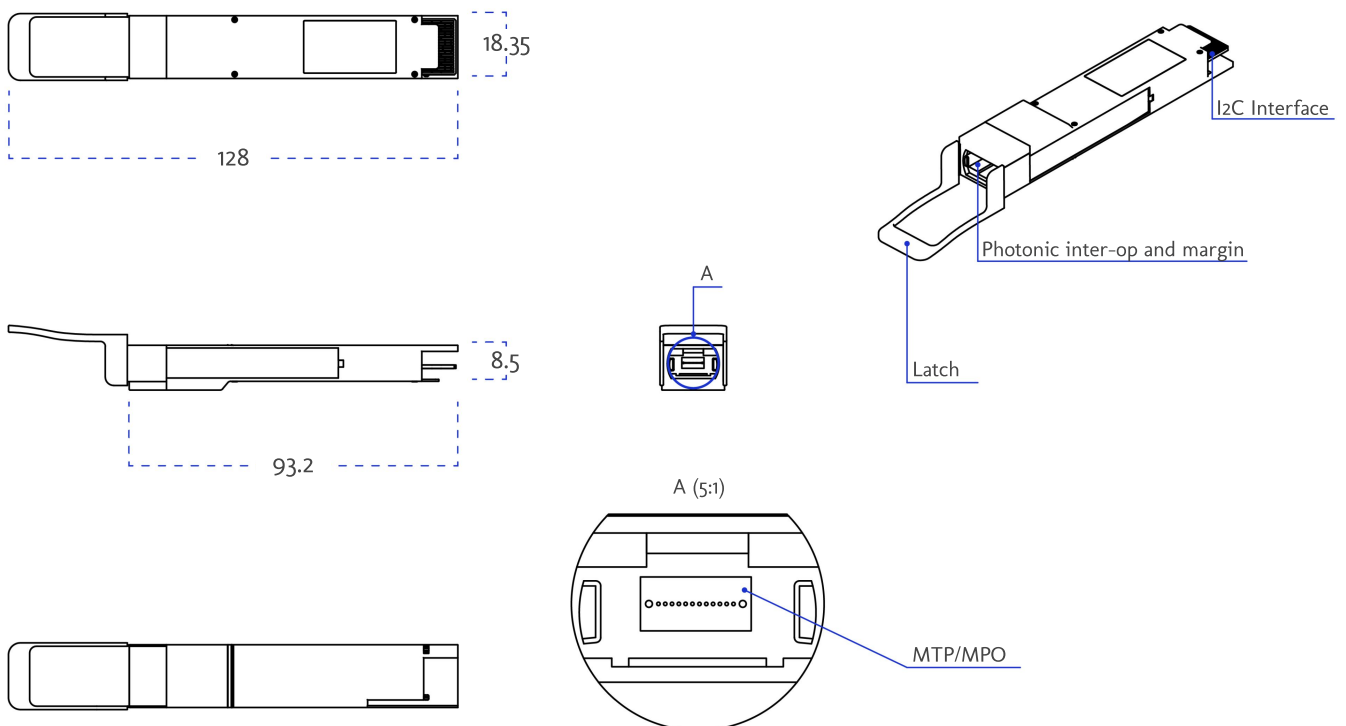
Media Type:	Single-Mode Fiber (SMF)
Connectors:	MTP/MPO-12
TX Wavelength:	1310 nm
RX Wavelength:	1310 nm
Minimum Optical Budget:	9dB
Maximum Distance:	10 km
Supported Data Rate:	425 Gbps

Product Specification:

Supported Applications:	400G Ethernet
DDM/DOM:	Supported
Forward Error Correction (FEC):	Host FEC Supported
Transmitter Type:	EML Laser
Tx Wavelength Bandwidth:	13 nm
Average Launch Power (Min) Each Lane:	0 dBm
Average Launch Power (Max) Each Lane:	5 dBm
Extinction Ratio (Min):	3.5 dB
Receiver Type:	PIN photodiode
Rx Wavelength Bandwidth:	13 nm
Avg Receiver Sensitivity(Min)Each Lane:	-9 dBm
Avg Receiver Sensitivity(Max)Each Lane:	4.5 dBm
Receiver Overload:	5 dBm
Temperature Range:	Standard 0°-70°C
Storage Temperature:	-40° to 85°C
Relative Humidity:	0 to 85%
Power Consumption:	≤ 14.5W
Power:	3.3V
Compliance:	100G Lambda MSA, IEC60825-1 Laser Safety Compliant, IEEE 802.3cd 400GBASE-DR4, 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
sales@edgeoptic.com

