

QSFP CWDM Transceivers S40-QP-LR4-D

Description:

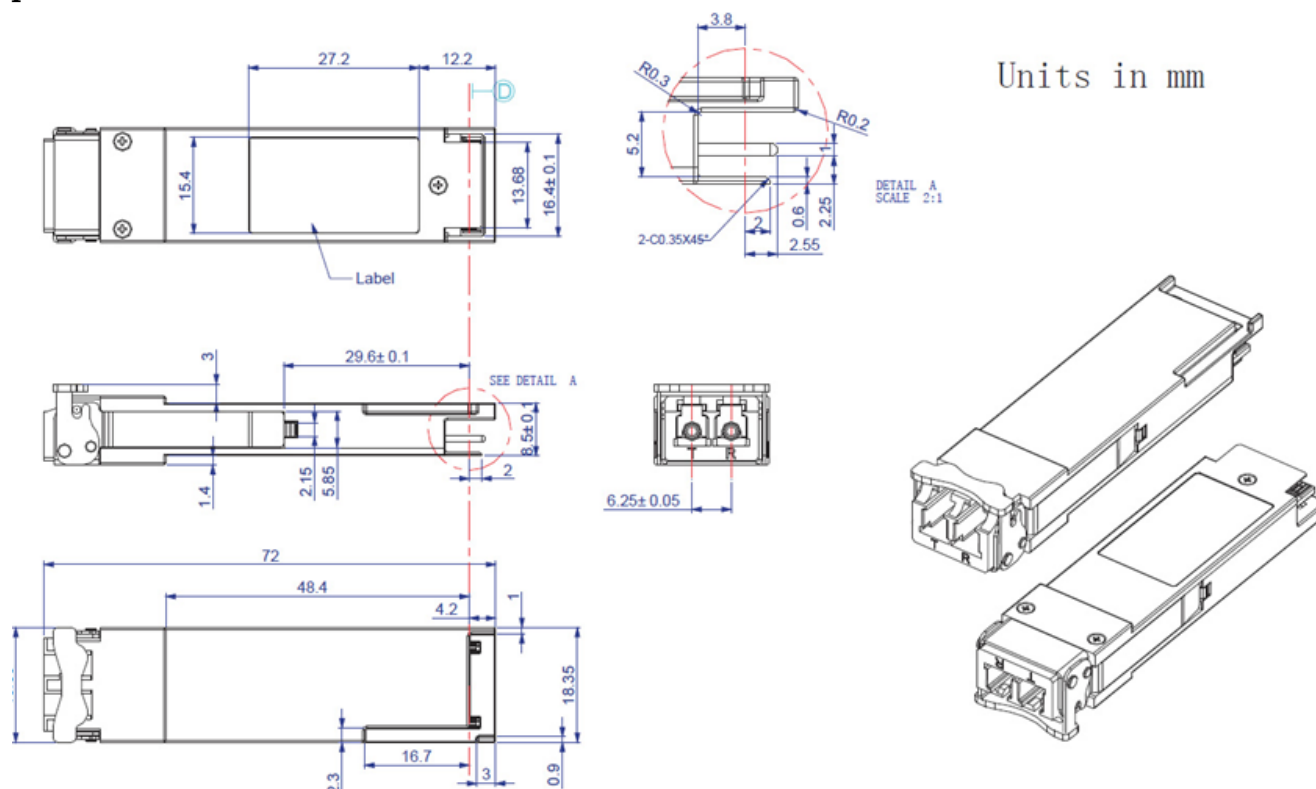
The S40-QP-LR4-10-D is designed to operate over single-mode fiber system using 4x10G CWDM channel in 1310 band and links up to 10km. The module converts 4 inputs channel of 10Gb/s electrical data to 4 CWDM optical signals, and multiplexes them into a single channel for 40Gb/s optical transmission. Reversely, on the receiver side, the module optically de-multiplexes a 40Gb/s input into 4 CWDM channels signals, and converts them to 4 channel output electrical data



Features:

- High Channel Capacity: 40 Gbps per module
- CWDM 1271, 1291, 1311, 1331 nm wavelengths
- Up to 11.1Gbps Data rate per channel
- Maximum link length of 10 Km
- Electrically hot-pluggable
- Digital diagnostic Monitoring interface
- Compliant with QSFP+ MSA with LC connector
- Case operating temperature range: 0°C to 70°C
- Power dissipation < 1.5 W

Specifications:



Digital Diagnostics Functions

OPTOKON transceivers support the 2-wire serial communication protocol as defined in the QSFP+ MSA, which allows real-time access to the following operating parameters:

- Transceiver temperature
- Laser bias current
- Transmitted optical power
- Received optical power
- Transceiver supply voltage

Safety and regulatory compliance and standards

- Compliant to SFF-8436
- Compliant to 802.3ba
- RoHS Compliant

Optical characteristics

Transmitter	Symbol	Min	Typ	Max	Unit
Total Output Power	P_{OUT}			8.3	dBm
Average Output power per lane		-7		2.3	
Optical Wavelength	λ_0	1264.5	1271	1277.5	nm
	λ_1	1284.5	1291	1297.5	nm
	λ_2	1304.5	1311	1317.5	nm
	λ_3	1324.5	1331	1337.5	nm
Optical Extinction Ratio	ER	3			dB
Output Eye Mask	compliant with 802.3ba				
SMSR		30			
Average launch Power off per lane	P_{off}			-30	dBm
Transmitter and Dispersion Penalty	TDP			2.3	dB
RIN	RIN			-128	dB/Hz
Spectral Width (-20dB)				1	nm

Receiver	Symbol	Min	Typ	Max	Unit
Rx Sensitivity	R_{SENS}			-11.5	dBm ¹
Input Saturation Power (Overload)	P_{SAT}	3.3			dBm
Receiver Reflectance	Rr			-26	dB

1 . Measured with a PRBS 2³¹ -1 test pattern, @10.325 Bb/s, BER <10⁻¹²

Application:

- 40G Ethernet
- Infiniband QDR
- Fiber channel

Ordering code:

Parameter	Description
S40-QP-LR4-D	40 Gbps SM, CWDM QSFP: 1271, 1291, 1311, 1331 nm distance:10 km and temperature: 0 °C to +70 °C