

Q-SFP-100G-LR4

SINGLE-MODE OPTICAL TRANSCEIVER, DUPLEX LC - 10 KM



Form Factor	Fiber Type	Connector	Max Reach
QSFP28	Single-mode (G.652 SMF)	Duplex LC	10 km

OVERVIEW

The Quant Q-SFP-100G-LR4 is a hot-pluggable QSFP28 optical transceiver engineered for 100G Ethernet links over single-mode fiber. It supports 100GBASE-LR4 operation with LAN WDM transmission, a duplex LC optical interface, and reach up to 10 km on G.652 SMF. The module also provides real-time digital diagnostic monitoring to support network visibility and maintenance.

Key Features	Typical Applications
<ul style="list-style-type: none"> Compliant with IEEE 802.3ba 100GBASE-LR4 103.1 Gb/s aggregate data rate 4 x 25G electrical interface LAN WDM transmitter wavelengths around 1295.56, 1300.05, 1304.58 and 1309.14 nm Maximum power consumption of 4.0 W RoHS compliant 	<ul style="list-style-type: none"> 100G Ethernet backbone and aggregation links Data center and enterprise networking Switch-to-switch and switch-to-router interconnects QSFP28 optical uplinks over single-mode fiber

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TECHNICAL SPECIFICATIONS

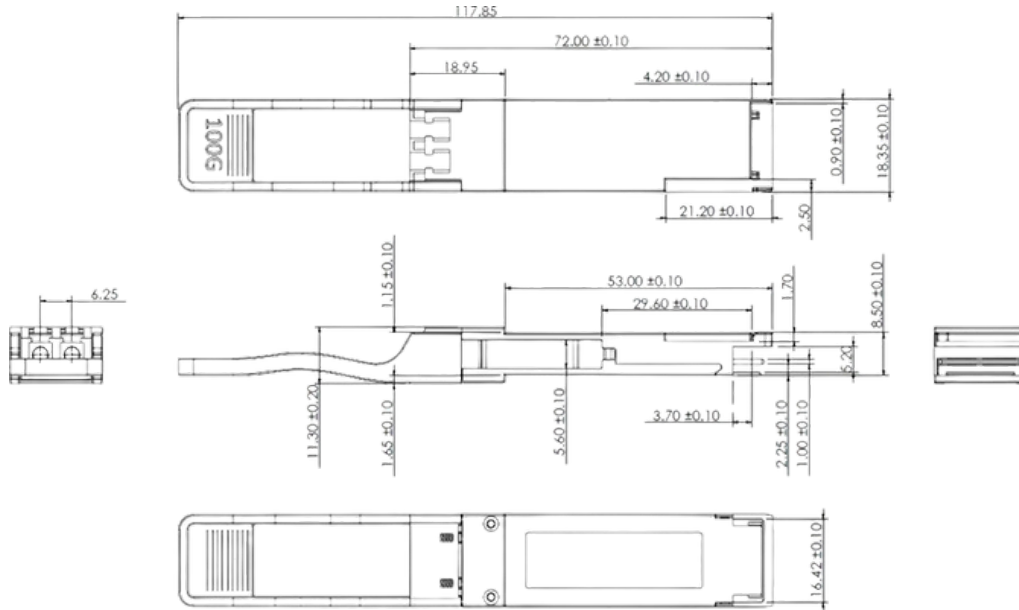
Parameter	Specification
Part Number	Q-SFP-100G-LR4
Description	100G QSFP28 LR4 optical transceiver with digital diagnostic monitoring
Form Factor	QSFP28, hot-pluggable
Standards Compliance	IEEE 802.3ba 100GBASE-LR4
Data Rate	103.1 Gb/s aggregate
Fiber Type	Single-mode fiber (G.652 SMF)
Connector	Duplex LC
Maximum Reach	10 km
Transmitter Type	Cooled 4 x 25G LAN WDM DFB
Receiver Type	4 x 25G PIN ROSA
Wavelengths	1295.56 / 1300.05 / 1304.58 / 1309.14 nm (typ.)
Electrical Interface	4 x 25G, OIF CEI-28G-VSR
Supply Voltage	Single +3.3 V
Maximum Power Consumption	4.0 W
Operating Case Temperature	0 to 70 °C
Storage Temperature	-40 to +85 °C
Relative Humidity	0 to 85%
Diagnostics	Temperature, supply voltage, RX power, TX power, and bias current monitoring

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PRODUCT DIMENSION



ORDERING INFORMATION

Q-SFP-100G-LR4

100G QSFP28 single-mode optical transceiver, duplex LC, 10 km, with DDM