

Q-SFP-10G-LR-20-I

10G SFP+ SINGLE-MODE OPTICAL TRANSCEIVER, LC, UP TO 20 KM



Form Factor	Fiber Type	Connector	Max Reach
SFP+	Single-mode (SMF)	Duplex LC	20 km

OVERVIEW

The Quant Q-SFP-10G-LR-20-I is a hot-pluggable SFP+ optical transceiver designed for 10 Gigabit Ethernet applications over single-mode fiber. It supports data rates from 9.95 Gb/s to 10.5 Gb/s and transmission distances up to 20 km using a 1310 nm DFB laser transmitter and PIN receiver. The module complies with IEEE 802.3ae 10GBASE-LR and SFF-8431 standards and provides Digital Diagnostic Monitoring (DDM) for real-time monitoring of operating parameters.

Key Features	Typical Applications
<ul style="list-style-type: none">Hot-pluggable SFP+ form factorSupports 9.95 – 10.5 Gb/s data rates1310 nm DFB laser transmitterDuplex LC optical interfaceTransmission distance up to 20 km over SMFIndustrial temperature range -40°C to +85°CLow power consumption (<1 W)Digital Diagnostic Monitoring (DDM) supportCompliant with IEEE 802.3ae 10GBASE-LRElectrical interface compliant with SFF-8431	<ul style="list-style-type: none">10GBASE-LR / 10GBASE-LW Ethernet links10G Fiber Channel ApplicationsSwitch-to-switch interconnectsRouter / server interfacesOptical transport networksEnterprise and telecom backbone links

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TECHNICAL SPECIFICATIONS

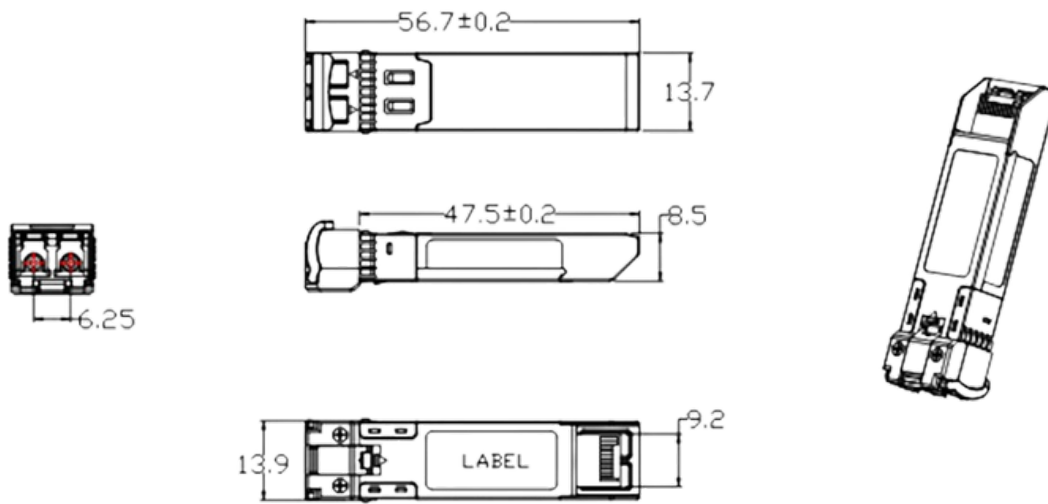
Parameter	Specification
Part Number	Q-SFP-10G-LR-20-I
Description	10G SFP+ LR optical transceiver with DDM
Form Factor	SFP+, hot-pluggable
Data Rate	9.95 – 10.5 Gb/s
Fiber Type	Single-mode fiber (SMF)
Connector	Duplex LC
Maximum Reach	20 km
Transmitter Type	1310 nm DFB laser
Receiver Type	PIN photodiode
Standards Compliance	IEEE 802.3ae, SFF-8431, SFF-8432
Supply Voltage	Single +3.3 V
Power Consumption	<1 W
Operating Temperature	-40°C to +85°C
Diagnostics	Temperature, voltage, TX/RX optical power monitoring

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PRODUCT DIMENSION



Dimensions are in Millimeter

Tolerance without indication is $\pm 0.1\text{mm}$

ORDERING INFORMATION

Q-SFP-10G-LR-20-I

10G SFP+ optical transceiver, 1310 nm, duplex LC connector, 20 km over single-mode fiber, industrial temperature (-40~+85°C), with DDM.