40G and 100G Products
**QSFP+ eSR4**

QSFP+ 40G extended range transceiver, in excess of 300m

**Application**
- The Prolabs QSFP+ eSR4 transceiver has been designed to reach distances which can be up to twice the distance of a C/SR4 module, dependant on the quality and performance of the OM4 fibre cable used.
- Ideal for the datacentre with OM4 MPO multimode fibre links, this is a cost effective solution for transporting 40G/s data when compared with more expensive LR4 transceivers.

**Top 5 Prolabs compatible Vendor SKUs**
- QSFP-40G-CSR4-C = Cisco compatible
- QSFP-40G-XSR4-C = Arista compatible
- QFX-QSFP-40G-ESR4-C = Juniper compatible
- GP-QSFP-40GE-1ESR-C = Dell / Force10 compatible
- ESR4-QSFP-40G-C = Generic compatible

**Features and Benefits**
- Cost effective solution to deliver 40G/s data rate in excess of 300m and up to 500m over MMF.
- 15dBm Power Budget (OMA) for where there are a number of links.
- Customers can continue to utilise MMF deployments rather than switching to SMF infrastructure.
- Supports breakout to 4x SFP+ transceivers if required using the correct MPO breakout cable.

**QSFP-40G-SR4**

QSFP-40G-SR4 transceiver for distances up to 300m
QSFP+ LX4 transceiver

QSFP 40G transceiver with Duplex LC port for use over single and multimode fibre

Application

• A single transceiver that enables 40G data transfer across both 150m MMF and 2km of SMF using duplex LC fibre.
• Typical application includes data centres and any other network migrating from 10G to 40G without upgrading existing OM3 multimode fibre runs.
• Universal (MMF & SMF) 40G transceiver applications.

Top ProLabs compatible Vendor SKUs

• WSP-Q40GLR4L-C = Cisco compatible (SMF applications only)
• 40GBASE-UNIV-C = Arista compatible
• JNP-QSFP-40G-LX4-C = Juniper compatible
• 40G-QSFP-LM4-C = Brocade compatible
• QSFP-40G-SR-BD-C = Cisco compatible* (Prolabs transceiver is required both sides of the link)
• LX4-QSFP-40G-C = Generic

Features and Benefits

• ProLabs’ LX4 transceiver is designed to operate over Single Mode Fibre up to a distance of 2km, and Multi Mode Fibre up to a distance of 150m, on OM3 (50 μ) cable.
• The ProLabs device is also an alternative to the Cisco QSFP-40G-SR-BD-C*. *ProLabs QSFP-40G-SR-BD-C is required at both ends of the link to ensure correct functionality.
• The ProLabs LX4 product allows customers with existing 10G multimode fibre infrastructure to upgrade to 40G speed, without replacing existing fibre runs.
QSFP+ LX4 transceiver
QSFP 40G transceiver with Duplex LC port for use over single and multimode fibre

• The QSFP+ LX4 uses only a duplex fibre (one fibre for TX, one for RX) and not a ribbon of fibres like QSFP+ SR4 (below).

The case for LX4 in Multimode applications

• QSFP+ LX4 works on both MM fibre (up to 150m OM3 fibre) and up to 2km of SM fibre, this is its major advantage (below).
QSFP+ ER4 transceiver

QSFP 40G transceiver with Duplex LC port for use over singlemode fibre

Application

• 40G data transmission up to 30km.
• Switch fabric extension.

Features and Benefits

• ProLabs’ ER4 transceiver is designed to operate over Single Mode Fibre up to a distance of 30km.
• The Prolabs ER4 product allows transmission of up to 40Gb/s long distances, perfect for connecting between campus networks.
• Power dissipation <3.5W

Top 5 ProLabs compatible Vendor SKUs

• QSFP-40G-ER4-C = Cisco compatible
• QSFP-40G-ER4-ARISTA-C = Arista compatible
• QFX-QSFP-40G-ER4-C = Juniper compatible
• 40G-QSFP-ER4-C = Brocade compatible
• ER4-QSFP-40G-C = Generic compatible
CFP 100G SR10
CFP 100G Transceiver for distances up to 100m

Application:
- ProLabs’ 100Gb/s CFP SR10 transceiver modules are an excellent solution for data centre networking and enterprise core aggregation due to their compact size and high port density.
- Datacom/Telecom switch & router connections
- Data aggregation and same room (100GbE and 10GbE interconnects)

Top ProLabs compatible Vendor SKUs
- CFP-100G-SR10-C = Cisco compatible
- CFP-100G-SR10-NC = Generic non-coded

Features and Benefits:
- Maximum link length of 100m on OM3 Multimode Fibre (MMF) and 150m on OM4 MMF
- 100GBASE-SR10 (IEEE 802.3ba) compliant optical specifications - ensures compatibility with other standards compliant optics