

Product Brief

Highlights

- Provides Ethernet connectivity over short distance
- Operates over multi-mode fiber
- Uses an industry-standard MPO-12 connector
- IEC 60825-1 Class 1/CDRH Class 1 laser, eye safe
- RoHS 6 compliant with 7(c)-I exemption
- PC/UPC compatible

Ordering Part Number

- XBR-100G-SR4-01 (1-pack)

Brocade[®] 100GbE SR4 QSFP

Optimized, Certified Ethernet Optical Transceiver for Extending Data Center Fabrics

Overview

The Brocade[®] 100GbE short reach (SR4) quad small form-factor pluggable (QSFP) transceiver, part of the Brocade family of optical transceivers, is optimized for Brocade products with Ethernet connectivity. This optical transceiver is a four-channel, pluggable, multimode, fiber optic QSFP28 transceiver for 100GbE applications. The transceiver is a high-performance module for short-range multilane data communication and interconnect applications. It integrates four data lanes in each direction with each lane operating at 25.78125Gb/s, giving an aggregated bandwidth of 103.125Gb/s. It allows optical interoperability up to 100m over an 8-fiber (or 12-fiber) MPO optical multimode OM4 cable. Each electrical lane operates at 25.78125Gb/s and conforms to the 100GbE CAUI-4 interface with IEEE 802.3 Clause 91 RS-FEC.

High speed electrical and optical specifications of the Brocade 100GbE SR4 QSFP transceiver comply with IEEE 802.3 Clause 91 RS-FEC, providing real-time monitoring of the following:

- Received optical power
- Laser bias current
- Temperature
- Supply voltage

End-to-End Compatibility and Reliability

Brocade 100GbE SR4 QSFP optical transceivers undergo rigorous qualification and certification testing to guarantee compatibility and ensure highly reliable connectivity in a storage network fabric.

Family of Optical Transceivers

Broadcom offers a comprehensive family of reliable optical transceivers to provide connectivity to Brocade director and switch products.

For additional information, contact a Brocade representative or visit www.broadcom.com/products/fibre-channel-networking/transceiver-modules.

Brocade 100GbE SR4 QSFP Specifications

System	
Performance	Ethernet: 25.78125Gb/s line speed per lane; aggregated bandwidth of 103.78125Gb/s
Media	Hot-pluggable, industry-standard QSFP, MPO connector.
Operating Parameters	<p>Transmit (Tx):</p> <ul style="list-style-type: none"> Wavelength: 840 nm to 860 nm Average power: -8.4 dBm to +2.4 dBm, each lane Optical return loss: 12 dB max. OMA: -6.4 dBm to +3.0 dBm, each lane <p>Receive (Rx):</p> <ul style="list-style-type: none"> Average power: +2.4 dBm max., each lane Optical return loss: -12 dB max. Unstressed sensitivity: 93 μW, -10.3 dBm, each lane
Mechanical	
Size	Width: 18.35 mm (0.72 in.) Height: 8.5 mm (0.33 in.) Depth: 71 mm (2.79 in.)
Environmental	
Storage Temperature	-40°C to +85°C (-40°F to +185°F)
Power	
Power Consumption	2.5W max.
Regulatory and Standards Compliance	
North America	UL/CSA 62368, CDRH Class 1
European Union	EN 62368, EN 60825 Class 1

Caution

Do not look through the optical ports, as it is a potential eye hazard. The QSFP is an ESD sensitivity Class 1 device. It should be handled accordingly.