Product Brief

Brocade® 64G SWL SFP-DD
Double-Density Optical Transceiver for High-Performance Data-Center Network Connectivity

Highlights

• Provides two optical connections in a single transceiver to support high-density SAN solutions.

• Operates over duplex multimode fiber.

• Uses industry-standard SN connectors.

• IEC 60825-1 Class 1/CDRH Class 1 laser, eye-safe.

• RoHS 6 compliant.

Ordering Part Number

• XBR-000464 (1-pack)

• XBR-000465 (8-pack)

Overview

The Brocade® 64G short wavelength (SWL) double-density optical transceiver (SFP-DD), part of the Brocade family of optical transceivers, is optimized for Brocade G720 and G730 device or ISL connectivity. Dual SN connectors from a single SFP-DD transceiver allow organizations to connect more servers, storage, or switches in a small footprint. Each transceiver supports two independent connections of 64G Fibre Channel via a two-lane electrical interface.

The Brocade 64G SWL SFP-DD transceiver is hot-swappable and supports high-speed serial links over multimode optical fiber at signaling rates up to 57.8Gb/s.

Diagnostic features per SFF-8472, *Diagnostic Monitoring Interface for Optical Transceivers*, provide real-time monitoring of the following:

• Transmitted optical power

• Received optical power

• Laser bias current

• Temperature

• Supply voltage

End-to-End Compatibility and Reliability

The Brocade 64G SWL SFP-DD 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 64G SWL SFP-DD Transceiver Specifications

System	
Performance	Fibre Channel: 57.8Gb/s, 28.05Gb/s, and 14.025Gb/s line speed, full duplex; autosensing of 64G, 32G, and 16G port speeds
Media	Hot-pluggable, industry-standard double-density optical transceiver (SFP-DD), short wavelength (SWL), SN connector
Operating Parameters	**Transmit (Tx):** • Wavelength: 840 nm to 860 nm • Spectral width: 0.6 nm • Average power: −7.5 dBm to 4 dBm • RIN: −128 dB/Hz max • OMA: −4.5 dBm min (355 µW) **Receive (Rx):** • Wavelength: 840 nm to 860 nm • Average power: −9.4 dBm to 4 dBm max • Optical return loss: 12 dB min • Unstressed sensitivity: −7 dBm (200 µW) • SRS OMA: −2.4 dBm (575 µW)
Operating Distances	**OM3 50 µm (2000 MHz×km):** • 16G Fibre Channel. Distance: 0.5m to 100m • 32G Fibre Channel. Distance: 0.5m to 70m • 64G Fibre Channel. Distance: 0.5m to 70m **OM4, OM4+, and OM5 50 µm (4700 MHz×km):** • 16G Fibre Channel. Distance: 0.5m to 125m • 32G Fibre Channel. Distance: 0.5m to 100m • 64G Fibre Channel. Distance: 0.5m to 100m
Mechanical	
Size	Width: 13.7 mm (0.54 inches) Height: 8.6 mm (0.34 inches) Depth: 79.19 mm (3.12 inches)
Environment	
Storage Temperature	−40°C to 85°C (−40°F to 185°F)
Power	
Power Dissipation	3.2W
Regulatory and Standards Compliance	
North America	UL/CSA 62368, CDRH Class 1
European Union	EN 60950, EN 60825 Class 1

Caution

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

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