

Aruba / J4859D

Single Mode 1G SFP LC LX 10KM SMF XCVR

SKU: J4859D | HPE Aruba Networking Transceiver

1G

Data Rate

10 km SMF Reach

1310 nm Wavelength

PRODUCT OVERVIEW

The **Aruba / J4859D / Single Mode 1G SFP LC LX 10KM SMF XCVR** is a hot-pluggable, small form-factor optical transceiver engineered by HPE Aruba to deliver dependable Gigabit Ethernet connectivity across enterprise and campus networks. Operating at a precise 1310 nm wavelength, it achieves a maximum reach of 10 km over 9/125 μm single-mode fibre, making it the ideal uplink solution for building-to-building links, data centre interconnects, and long-distance backbone runs. The module slots into any SFP-capable Aruba switch — including the 2530, 2920, 2930F, and 3810M series — and uses the standard duplex LC connector for straightforward deployment. With a maximum data rate of 1.25 Gbps, full compliance with IEEE 802.3z 1000BASE-LX/LH, SFP MSA (SFF-8472), and RoHS/CE certification, the J4859D sets the benchmark for reliability. Support for Digital Optical Monitoring (DOM/DDM) enables real-time diagnostics of transmit power, receive power, bias current, supply voltage, and temperature — giving network administrators proactive visibility and reducing unplanned downtime. Low power consumption of ≤ 1.0 W and an operating temperature range of 0 °C to 70 °C ensure stable, energy-efficient performance in standard indoor environments.

KEY FEATURES

◆ Long-Distance SMF Reach

Transmits up to 10 km over 9/125 μm single-mode fibre — ideal for campus backbone and inter-building links.

◆ Hot-Pluggable SFP Form Factor

Allows live insertion and removal without powering down the host switch, minimising network disruption.

◆ DOM / DDM Diagnostics

Real-time monitoring of optical Tx/Rx power, laser bias current, supply voltage, and module temperature via SFF-8472.

◆ IEEE 802.3z & MSA Compliant

Fully compatible with 1000BASE-LX/LH standard and SFP Multi-Source Agreement for broad interoperability.

◆ Low Power & RoHS Certified

Consumes ≤ 1.0 W in operation and meets RoHS and CE environmental standards for safe, eco-friendly deployment.

TECHNICAL SPECIFICATIONS

PARAMETER	SPECIFICATION / DETAIL
■ ■ Optical ■ ■	
Transceiver Type	SFP (Small Form-factor Pluggable), Hot-pluggable
Data Rate	1.25 Gbps (1000BASE-LX / 1G Ethernet)
Wavelength	1310 nm (nominal)
Fiber Type	Single-Mode Fiber (SMF) 9/125 μm

PARAMETER	SPECIFICATION / DETAIL
Max. Transmission Distance	10 km over SMF 550 m over MMF (with mode conditioning cable)
Connector Type	Duplex LC (UPC polish)
Optical Budget	≥ 15 dB (guaranteed minimum)
Transmitter	FP Laser (Fabry-Pérot)
Receiver	
■ ■ Electrical & Standards ■ ■	
Interface Standard	SFP MSA (SFF-8472); IEEE 802.3z 1000BASE-LX/LH
Supply Voltage	3.3 V DC
Max. Power Consumption	≤ 1.0 W
Digital Diagnostics (DOM)	
■ ■ Environmental & Physical ■ ■	
Operating Temperature	0 °C to 70 °C (32 °F to 158 °F)
Storage Temperature	-40 °C to 85 °C
Dimensions	
Certifications	CE, RoHS, FCC
■ ■ Compatibility ■ ■	
Compatible Platforms	Aruba 2530, 2920, 2930F, 2930M, 3810M, 5400R series; HPE ProCurve switches
Part Number	J4859D
Product Line	HPE Aruba Networking Transceivers

APPLICATIONS & USE CASES

Enterprise Campus Networks	Inter-building Gigabit links across campus environments.
Data Centre Interconnects	Top-of-rack to aggregation or core switch uplinks over SMF.
ISP / Service Provider	Long-haul access and aggregation fibre segments.
LAN & SAN Backbones	High-reliability storage area network and LAN backbone runs.

SEO & PRODUCT INFORMATION

SEO Title	Aruba / J4859D / Single Mode 1G SFP LC LX 10KM SMF XCVR HPE Gigabit Transceiver
Focus Keyphrase	Aruba / J4859D / Single Mode 1G SFP LC LX 10KM SMF XCVR

Meta Description	Aruba J4859D — 1G SFP LC LX transceiver, 10 km SMF, 1310 nm, DOM support. Hot-pluggable Gigabit uplink for Aruba & HPE switches.
Short Description	HPE Aruba 1G SFP LC LX transceiver — 10 km SMF reach, 1310 nm, DOM/DDM, hot-pluggable. Ideal for enterprise Gigabit uplinks.
Tags	Aruba · SFP Transceiver · 1000BASE-LX · Single Mode Fiber · Gigabit Optical Module
Manufacturer Page	https://buy.hpe.com — HPE Aruba Networking 1G SFP LC LX 10km SMF Transceiver (J4859D)