

SRX-XFP-10GE-LR ^(EOL)

Part number: 740-014279

Optics Overview

Juniper Networks offers a complete portfolio of modular and fixed-chassis routers and switches for both WAN and data center networks. These solutions span Juniper’s MX-Series Universal Routing Platform and PTX-Series Packet Transport Routers to EX-Series Ethernet Switches and QFX-Series Data Center Switches among others. Depending on deployment scenarios, Juniper’s platforms support different pluggable optic modules that can be selected based on speed, distance, form-factor, and wavelength among other relevant attributes.

Additional Resources

Hardware Compatibility Tool

HCT contains a regularly updated database of Juniper’s transceivers, DACs, and AOCs along with information regarding compatibility with Juniper’s platforms and interface modules.

<https://apps.juniper.net/hct/home/>

Product Description

10GE XFP pluggable transceiver, singlemode 1310nm 10km reach

Overview

Part Number	740-014279
Speed	10 Gigabit Ethernet
Breakout Capable	No
Transceiver Type	XFP
Product Type	Optical Transceiver
Connector	Duplex LC
Monitoring Available	Yes
Digital Optical Monitoring	Yes

Note:

- Monitoring Available - Can measure received optical power and display in CLI.
- Digital Optical Monitoring - Full support for SFF-8636.
- Common Optic - The common optics product line provides competitively priced single-SKU optics offerings for use across Juniper routing, switching, and security platforms.

Specifications

Standard: 10GBASE-LR

MSA compliance (SFF, for e.g. SFF-8665)	INF-8077i
Optic Type (Commercial Vs Service Provider Grade)	Commercial
Digital Diagnostic Monitoring	Tx Power Rx Power Tx Bias Current Case Temperature Power Supply Voltage
Signaling rate, each lane	10 Gbps
Transmitter fibers	SMF
Transmitter wavelengths (range)	1260 nm to 1355 nm
Receive lane wavelengths (range)	1260 nm to 1355 nm
Transmitter output power, each lane (minimum)	-8.2 dBm
Transmitter output power, each lane (maximum)	0.5 dBm
Receiver input power, each lane (minimum)	-14.4 dBm
Receiver input power, each lane (maximum)	0.5 dBm
Receiver sensitivity (OMA), each lane (maximum)	-12.6 dBm
Stressed receiver sensitivity (OMA) each lane (maximum)	-10.3 dBm
Cable type	SMF
Distance	10 km
Maximum Power consumption (W)	2.0 W
Operating Temperature (range)	-5° C to 70° C
Storage temperature	-40° C to 85° C
Typical Weight & Dimensions	Weight: 0.15 kg Height: 8.55 mm Width: 18.5 mm Depth: 71 mm

Supported Platforms

Platform	Introduced Release	Additional Information
Security		
SRX1400		
SRX3400		
SRX3600		
SRX5400		
SRX5600		
SRX5800		
Switching		
EX4200	Junos OS 9.0R2	EX4200-24F-S and EX4200-48T-S switches—Junos OS for EX Series switches, Release 12.3R4 or later

Supported Interface Modules

I/O cards (IOCs)

Name	Description	Platforms and Introduced Releases	
10 Gigabit Ethernet			
SRX-IOC-4XGE-XFP ^(EOL)	Port module with four 10-Gigabit Ethernet XFP ports	SRX5600 Junos OS 10.2R1	SRX5800 Junos OS 10.2R1
SRX3K-2XGE-XFP	2-port Ethernet XFP IOC for SRX3400, SRX3600, and SRX1400	SRX1400 Junos OS 10.4R1 SRX3600 Junos OS 9.4R1	SRX3400 Junos OS 9.4R1
SRX5K-4XGE-XFP ^(EOL)	I/O card with four 10-Gigabit Ethernet XFP ports	SRX5600 Junos OS 9.2R1	SRX5800 Junos OS 9.2R1

Why buy optics from Juniper?

There is value in choosing Juniper over 3rd party optics

✓ Full testing, validation, and JTAC support for Juniper optics

- Power, Electrical, and Management interfaces tested at the system level.
- Extended temperature and functional testing in DVT chamber using fully loaded systems.
- Full software integration into JUNOS/EVO for seamless part recognition, functionality, and telemetry.
- Latest qualification status and optics specifications published on [Hardware Compatibility Tool](#).

✓ Single-source provider for 1G to 400G on a variety of optical technologies

- Juniper's optics portfolio is maintained and constantly refreshed based on vendor availability.
- Automatic supply chain diversity and supply continuity - multiple optics suppliers fulfilled through Juniper.

✓ Rigorous evaluation of optical vendors

- Juniper ensures uniformity across all vendors by standardizing P-Specs for management, specs, and logs.
- Vendors are scored based on engineering and supply-chain analysis.
- Factory audits and critical component evaluation (Ex. Who is supplying the laser?).

Aren't 3rd party optics the same?

Optics may be a commodity, but some things are too good to be true

× Juniper does not Provide JTAC support for 3rd party optics

- JTAC will only assist with host-related issues unrelated to the use of 3rd party optics.

× Not all optics are the same - standards compliance does not guarantee quality or performance

- Third-party providers lack system-level knowledge and testing.
- No guarantee of vendor reliability or accountability.

× Newer technologies (ex. Coherent 400G ZR/ZR+) are complex and not simply plug-and-play

- Significant software integration necessary to enable full functionality, management, and telemetry.
- Use of unqualified 3rd party high-power optics can damage the host equipment.

× Third-party providers simply can't scale

- Incomplete solution offerings and fast turnaround times only for limited quantities.

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