

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

Part number: 740-014290

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 40km single-mode pluggable interface

Overview

Part Number	740-014290
Speed	10 Gigabit Ethernet
Breakout Capable	No
Transceiver Type	XFP
Product Type	Optical Transceiver
Connector	Duplex LC
Monitoring Available	—
Digital Optical Monitoring	—

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-ER

Transmitter wavelengths (range)	1550 nm
Cable type	SMF
Core size/cladding	9/125 µm
Distance	40 km
Maximum Power consumption (W)	3.5 W
Operating Temperature (range)	-5° C to 70° C
Storage temperature	-40° C to 85° C

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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