

# CFP-100GBASE-SR10

Part number: 740-035329

## 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

CFP 100G Pluggable Transceiver, 100m with OM3 fiber and 150m with OM4 fiber

## Overview

Part Number	740-035329
Speed	100 Gigabit Ethernet
Breakout Capable	No
Transceiver Type	CFP
Product Type	Optical Transceiver
Connector	MPO-24
Monitoring Available	Yes
Digital Optical Monitoring	—

Note:

- Monitoring Available - Can measure received optical power and display in CLI.
- Digital Optical Monitoring - Full support for SFF-8636.

## Specifications

### Standard: 100GBASE-SR10

Standards compliance (Ethernet/OTN Standard, for e.g. 100GBASE-LR4)	IEEE 802.3ba–2010	
Signaling rate, each lane	100 Gbps	
Transmitter wavelengths (range)	840 through 860 nm	
Transmitter output power, each lane (minimum)	-7.6 dBm	
Transmitter output power, each lane (maximum)	2.4 dBm	
Receiver input power, each lane (minimum)	-9.5 dBm	-9.1 dBm
Receiver input power, each lane (maximum)	2.4 dBm	2.4 dBm
Cable type	MMF	
Fiber grade	OM3	OM4
Distance	100 m	
Maximum Power consumption (W)	16 W	
Operating Temperature (range)	0° C to 70° C	
Storage temperature	-40° C to 85° C	

## Supported Platforms

Platform	Introduced Release	Additional Information
<b>Routing</b>		
MX240	Junos OS 12.1R1	
MX480	Junos OS 12.1R1	
MX960	Junos OS 12.1R1	
MX2008	Junos OS 15.1F7	
MX2010	Junos OS 12.3R2	
MX2020	Junos OS 12.3R1	
PTX3000		
PTX5000		
<b>Switching</b>		
EX9204	Junos OS 13.2R1	
EX9208	Junos OS 13.2R1	
EX9214	Junos OS 13.2R1	

## Supported Interface Modules

### Line Cards

Name	Description	Platforms and Introduced Releases	
<b>100 Gigabit Ethernet</b>			
EX9200-2C-8XS	A line card with two 100-Gigabit Ethernet ports and eight 10-Gigabit Ethernet ports	EX9204 Junos OS 13.2R1	EX9208 Junos OS 13.2R1
		EX9214 Junos OS 13.2R1	

## Modular Interface Cards (MICs)

Name	Description	Platforms and Introduced Releases	
100 Gigabit Ethernet			
MIC3-3D-1X100GE-CFP	100-Gigabit Ethernet MIC with CFP	MX240 Junos OS 12.1R1	MX480 Junos OS 12.1R1
		MX960 Junos OS 12.1R1	MX2008 Junos OS 15.1F7
		MX2010 Junos OS 12.3R2	MX2020 Junos OS 12.3R1

## Modular Port Concentrators (MPCs)

Name	Description	Platforms and Introduced Releases	
100 Gigabit Ethernet			
MPC4E-3D-2CGE-8XGE	2x100GE + 8x10GE MPC4E	MX240 Junos OS 12.3R2	MX480 Junos OS 12.3R2
		MX960 Junos OS 12.3R2	MX2008 Junos OS 15.1F7
		MX2010 Junos OS 12.3R2	MX2020 Junos OS 12.3R2

## Physical Interface Cards (PICs)

Name	Description	Platforms and Introduced Releases	
100 Gigabit Ethernet			
P1-PTX-2-100GE-CFP	100-Gigabit Ethernet PIC with CFP (PTX Series)	PTX3000 Junos OS 13.2R2	PTX5000 Junos OS 12.1X48R1

## Why buy optics from Juniper?

There is value in choosing Juniper over 3<sup>rd</sup> 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 3<sup>rd</sup> 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 3<sup>rd</sup> party optics

- JTAC will only assist with host-related issues unrelated to the use of 3<sup>rd</sup> 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 3<sup>rd</sup> 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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