

Cisco QSFP-40G-SR4 Datasheet

40GBASE-SR4 QSFP+ Transceiver Module for Multimode Fiber (100m/150m, 850nm, MPO/MTP)

Product Overview

The **Cisco QSFP-40G-SR4=** is a 40GBASE-SR4 QSFP+ (Quad Small Form-Factor Pluggable Plus) optical transceiver module designed for high-density 40 Gigabit Ethernet short-reach data center and high-performance computing network links. Operating over 12-fiber parallel Multimode Fiber (MMF) with MPO/MTP connectors at an 850nm wavelength, it supports distances up to **100 meters on OM3** and **150 meters on OM4** multimode fiber. Additionally, it can be breakout-configured into four independent 10GBASE-SR interfaces using 4x10G breakout cabling.

Key Features & Benefits

- **High-Density Connectivity:** Supports 4x 10 Gbps independent lanes to deliver aggregated 40 GbE bandwidth.
- **Flexible Breakout Capability:** Can be operated as 40GBASE-SR4 or split into 4x 10GBASE-SR interfaces via MPO-to-LC breakout cables.
- **Multimode Cable Distance:** Reaches up to 100m over OM3 MMF and 150m over OM4 MMF.
- **Standardized Interface:** Uses a 12-fiber MPO/MTP female connector interface.
- **Digital Optical Monitoring (DOM):** Real-time parameter monitoring (temperature, supply voltage, TX bias current, TX/RX power).
- **Hot-Swappable:** Enables effortless installation and maintenance without disrupting network operations.
- **Standards Compliance:** Fully compliant with IEEE 802.3ba 40GBASE-SR4, SFF-8436, and SFF-8636 standards.

Technical Specifications

Parameter	Specification / Value
Product Name	Cisco 40GBASE-SR4 QSFP+ Transceiver Module
Part Number (PID)	QSFP-40G-SR4=
Form Factor	QSFP+ (Hot-swappable)
Wavelength	850 nm (VCSEL)
Cable Type	Multimode Fiber (MMF, OM3/OM4)
Max Distance	100 m (OM3) / 150 m (OM4)
Connector Type	MPO-12 / MTP-12 Female
Data Rate	41.25 Gbps (4 x 10.3125 Gbps lanes)
Transmit Power (TX)	-7.6 dBm to +2.4 dBm (per lane)
Receiver Sensitivity (RX)	-9.5 dBm (OMA, per lane)
Power Consumption	< 1.5 Watts
Operating Temp Range	Commercial: 0°C to 70°C (32°F to 158°F)
Storage Temp Range	-40°C to 85°C (-40°F to 185°F)
Digital Diagnostics (DOM)	Supported (SFF-8636 compliant)

Platform Compatibility & Standards

The Cisco QSFP-40G-SR4 module is widely supported across Cisco data center switches and routers, including the **Cisco Nexus 3000, 5000, 6000, 7000, and 9000 Series, Catalyst 9500 / 9600 Series, and ASR 9000 Series Routers.**

Compliance Standards: IEEE 802.3ba (40GBASE-SR4), SFF-8436, SFF-8636, RoHS-6 compliant, Laser Class 1M (IEC 60825-1).