

Cisco SFP-10G-SR=

10GBASE-SR SFP+ Multimode Optical Transceiver Module

DATASHEET

Product Overview: The Cisco SFP-10G-SR= (Spare) is an industry-standard 10GBASE-SR SFP+ optical transceiver designed for high-speed 10 Gigabit Ethernet connectivity over multimode fiber (MMF). Operating at a nominal wavelength of 850nm, it supports transmission distances up to 300 meters on OM3 laser-optimized fiber and up to 400 meters on OM4 fiber. It features Digital Optical Monitoring (DOM/DDM) and hot-swappable SFP+ compliance for seamless deployment across Cisco switches and routers.

10.3 Gbps

DATA LINE RATE

850 nm

LASER WAVELENGTH

Up to 400m

REACH (OM4 MMF)

1.0 W

MAX POWER DRAW

OPTICAL & TRANSMISSION SPECIFICATIONS

Parameter	Specification Details
Standard Compliance	IEEE 802.3ae 10GBASE-SR, 10GBASE-SW, SFF-8431, SFF-8432, SFF-8472
Optics & Transmitter Type	850nm VCSEL (Vertical-Cavity Surface-Emitting Laser) Transmitter
Receiver Type	PIN Photodetector
Transmit Power (dBm)	Maximum: -1.2 dBm Minimum: -7.3 dBm
Receive Power (dBm)	Maximum (Receiver Overload): -1.0 dBm Minimum Sensitivity: -9.9 dBm
Wavelength Range	840 nm to 860 nm (850 nm center wavelength)

CABLE & DISTANCE MATRIX

Fiber Cable Type	Core Diameter (Microns)	Modal Bandwidth (MHz·km)	Max Cable Distance
FDDI-grade MMF	62.5 µm	160 MHz·km	26 meters (85 ft)
OM1 MMF	62.5 µm	200 MHz·km	33 meters (108 ft)
OM2 MMF	50.0 µm	500 MHz·km	82 meters (269 ft)
OM3 MMF (Laser-Optimized)	50.0 µm	2000 MHz·km	300 meters (984 ft)
OM4 MMF (Laser-Optimized)	50.0 µm	4700 MHz·km	400 meters (1,312 ft)

PHYSICAL & POWER CHARACTERISTICS

Connector Interface	Duplex LC Female Connector
Form Factor & Latch	Hot-pluggable SFP+ Footprint with Beige Bail Latch Color Code
Power Consumption	Power dissipation < 1.0 Watts (Supply Voltage: 3.3V)

KEY MODULE CAPABILITIES & ARCHITECTURE

Hot-Swappable SFP+ Footprint

Allows insertion and removal from SFP+ ports on live Cisco switches and routers without interrupting active network traffic or requiring system reboots.

Hot-Swappable

Zero Downtime

Digital Optical Monitoring (DOM)

Real-time optical diagnostic monitoring per SFF-8472, providing visibility into TX/RX optical power, operating temperature, laser bias current, and supply voltage.

DOM / DDM

SFF-8472

Cisco Quality Identification (ID)

Includes built-in Cisco Quality Identification feature that allows Cisco platforms to verify certified hardware and prevent software compatibility issues.

Cisco Qualified

Auto-Detect

Optical Interoperability

Interoperable on the same link with legacy 10GBASE-SR optics across XENPAK, X2, and XFP form factors on compliant multimode fiber runs.

XENPAK Interop

XFP Interop

REGULATORY & SAFETY COMPLIANCE

Category	Standards & Certifications Supported
Laser Safety Class	Class 1 Laser Product compliant with FDA/CDRH and IEC 60825-1 / EN 60825-1
Environmental Standards	RoHS 6/6 compliant (lead-free), CE Mark, REACH compliant
EMC & Immunity	FCC Class B Part 15, EN 55022 Class B, EN 55024, CISPR 22 Class B, VCCI Class B
ESD & Electrical Safety	IEC/EN 61000-4-2 ESD protection, UL 60950-1, CSA C22.2 No. 60950-1

SUPPORTED PLATFORM FAMILIES & ORDERING INFORMATION

Part Number (PID)	Description & Platform Compatibility
SFP-10G-SR=	Cisco 10GBASE-SR SFP+ Transceiver Module for MMF (Spare Unit)
SFP-10G-SR	Cisco 10GBASE-SR SFP+ Transceiver Module for MMF (Standard Production PID)
SFP-10G-SR-S=	Cisco 10GBASE-SR SFP+ Transceiver Module, S-Class (Enterprise Class Spare)
Supported Switches	Cisco Catalyst 2960/3650/3850/9200/9300/9400/9500/9600, Nexus 3000/5000/7000/9000
Supported Routers	Cisco ASR 900/1000/9000 Series, ISR 4000 Series, NCS 5000/5500 Series

Warranty & Service: The Cisco SFP-10G-SR= includes Cisco's standard 90-day limited hardware warranty. Extended service and hardware replacement coverage is supported through active Cisco SMARTnet service contracts on the host platform.