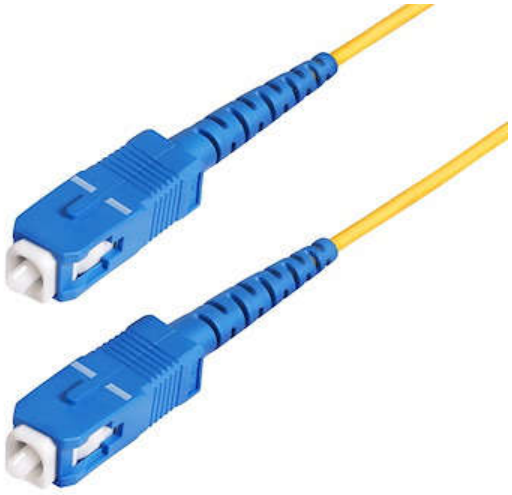
100m (328ft) SC to SC (UPC) OS2 Single Mode Simplex Fiber Optic Cable, 9/125m, 40G/100G, Bend Insensitive, Low Insertion Loss, LSZH Fiber Patch Cord

Product ID: SPSMSCSC-OS2-100M



OS2 SC to SC Single Mode Simplex Fiber Optic Patch cable facilitates connectivity across 40G/100G networks. It supports Coarse Wavelength Division Multiplexing (CWDM) across an extended wavelength range of 1260-1625nm, improving channel isolation for optimal signal strength over long distances.

Connect to single-fiber networking devices including simplex patch panels, SFP transceivers, and fiber NICs. This 9/125m OS2 simplex single mode fiber patch cord is backward compatible with OS1 networks, ensuring a reliable connection in legacy fiber environments.

Precision-manufactured ceramic ferrules ensure accurate fiber alignment for an insertion loss below 0.3dB. Ultra Physical Contact (UPC)-polished SC to SC fiber ends greatly improve return loss characteristics over older PC polishing techniques. The Bend Insensitive fiber core is surrounded by a layer of low refractive index material. This material reduces the amount of light that can escape the fiber cable by reflecting the light back into the fiber. The OS2 fiber patch cord is engineered for low attenuation and performance that exceeds ITU-T G652.D/G657.A1 and IEC60703-2-50 type B1.3/B6.a1 industry standards.

Housed in a Low-Smoke Zero-Halogen (LSZH) flame-retardant jacket, the OS2 fiber cable emits low smoke and toxic fumes when exposed to extreme heat or in the event of a fire. This enables safer cable installations in areas with poor ventilation including some industrial settings, self-contained environments such as trains and aircraft, as well as residential settings where compliance with building codes must be considered.

Each OS2 fiber cable is individually tested for insertion loss performance and includes a test report, for guaranteed compatibility and 100% reliability.

Certifications, Reports and Compatibility



Applications

• Use in 40/100 Gigabit Ethernet and fiber-channel applications

• For high-speed, low-latency simplex connections between servers, switches, and storage devices

• Enable seamless single-fiber data transmission with minimal signal loss

Features

• SIMPLEX OS2 CABLE: Single Mode Simplex OS2 Fiber Cable is immune to EMI and optimized for 40G/100Gbps networks; Supports bi-directional (BiDi) transmission over a single fiber; Ideal for space-constrained installations requiring minimal fiber count

• QUALITY CONSTRUCTION: SC/SC-UPC ends for improved return loss over PC polish; Bend Insensitive fiber core housed in Aramid-reinforced jacket for a loaded bend radius of 10mm

• SAFETY AND RELIABILITY: Individually tested for guaranteed performance; Test report included; LSZH jacket emits low toxic fumes if combusted; Safe for enclosed/poorly ventilated spaces; Attenuation value under 0.35dB/km outperforms industry standards

• COMPATIBILITY: Simplex Single Mode Fiber Patch Cord supports 40G/100G networks; Backward compatible with OS1; High micro-bend resistance facilitates tight bends in complex installations; Ideal for point-to-point setups or single-fiber NICs and SFPs

• SPECS: 100m (328 foot); OS2 Single Mode; SC/SC (UPC) Simplex; 100Gbps; 9/125um; 1260-1625nm Laser Optimized; Insertion Loss: 0.3dB; Return Loss: 55dB; Cable OD: 2mm; Bend Radius: 10mm (0.39in) loaded/unloaded

Hardware		
	Warranty	Lifetime
	Active or Passive Adapter	Passive
	Cable Jacket Material	Low Smoke Zero Halogen
	Fire Rating	LSZH Rated (Low Smoke Zero Halogen)
	Fiber Size	9/125
Performance		
	Maximum Data Transfer Rate	100Gbps

	Cable Rating	1Gbps / 10Gbps / 40Gbps / 100Gbps
	Fiber Classification	OS2
	Type	Single Mode
	Wavelength	1260nm to 1625nm
	General Specifications	Insertion Loss: 0.3dB
		Return Loss: 55dB ,
Connector(s)		
	Connector A	1 - Fiber Optic SC Simplex
	Connector B	1 - Fiber Optic SC Simplex
Environmental		
	Operating Temperature	-20C - 60C (-4F - 140F)
	Storage Temperature	-20C - 60C (-4F - 140F)
	Humidity	40% - 70%
Physical Characteristics		
	Color	Yellow
	Connector Style	Straight
	Material	Polypropylene (PP)
	Cable OD	0.1 in [2 mm]
	Product Length	0.0 in [0.0 mm]
	Product Width	0.0 in [0.0 mm]
	Product Height	0.0 in [0.0 mm]
	Weight of Product	0.0 oz [0.0 g]
Packaging Information		
	Package Length	11.0 in [28.0 cm]
	Package Width	11.0 in [28.0 cm]
	Package Height	0.7 in [1.8 cm]

	Shipping (Package) Weight	12.6 oz [356.1 g]

What's in the Box

Included in Package	1 - Single Mode Fiber Optic Cable - SC to SC
	1 - Test Report

Product appearance and specifications are subject to change without notice.