50m (164ft) LC to SC (UPC) OS2 Single Mode Duplex Fiber Optic Cable, 9/125m, Laser Optimized, 10G, Bend Insensitive, Low Insertion Loss, LSZH Fiber Patch Cord

Product ID: SMLCSC-OS2-50M



OS2 LC to SC Single Mode Duplex Fiber Optic Patch cable facilitates connectivity across 10G networks. It supports CDWM (Coarse Wavelength Division Multiplexing) across an extended wavelength range of 1260-1625nm, improving channel isolation for optimal signal strength over long distances.

This 9/125m Single Mode fiber cable supports 1260-1625nm laser-optimized sources and is ideal for critical connections between servers, switches, and data center equipment. It is backward compatible with OS1 networks, ensuring a reliable connection in legacy fiber environments.

Precision-manufactured ceramic ferrules ensure correct fiber alignment to preserve insertion loss below 0.3dB. Ultra Physical Contact (UPC)-polished LC to SC fiber ends greatly improves 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 LSZH (Low-Smoke, Zero-Halogen) 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 10 Gigabit Ethernet and fiber-channel applications

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

• Enable seamless data transmission with minimal signal loss

Features

• OS2 FIBER CABLE: Single Mode OS2 Fiber Cable is immune to EMI and optimized for 10Gbps networks; Coarse Wavelength Division Multiplexing (CWDM) enables extended 1260-1625nm wavelength support for greater channel isolation over long distances

• QUALITY CONSTRUCTION: LC/SC-UPC ends for improved return loss over PC polish; Color-coded connectors to indicate polarity; 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: Single Mode Fiber Patch Cord supports 10G networks; Backward compatible with OS1; High micro-bending resistance facilitates tight bends in intricate installations; Ideal for connecting between servers/switches and data center equipment

• SPECS: 50m (164ft); OS2 Single Mode; LC/SC (UPC) Duplex; 10Gbps; 9/125m; 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	10Gbps

	Cable Rating	1Gbps / 10Gbps
	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 LC Duplex
	Connector B	1 - Fiber Optic SC Duplex
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	164.0 ft [50.0 m]
	Product Width	1.0 in [2.5 cm]
	Product Height	0.0 in [0.0 mm]
	Weight of Product	0.0 oz [0.0 g]
Packaging Information		
	Package Length	9.8 in [25.0 cm]
	Package Width	9.8 in [25.0 cm]
	Package Height	0.7 in [1.8 cm]

	Shipping (Package) Weight	12.8 oz [361.2 g]

What's in the Box

Included in Package	1 - 50m OS2 Single Mode Fiber Optic Cable - LC to SC

Product appearance and specifications are subject to change without notice.