

PoF-SC-MECH-1

SC-Type Mechanical Splicing Optical-Electrical Hybrid Connector

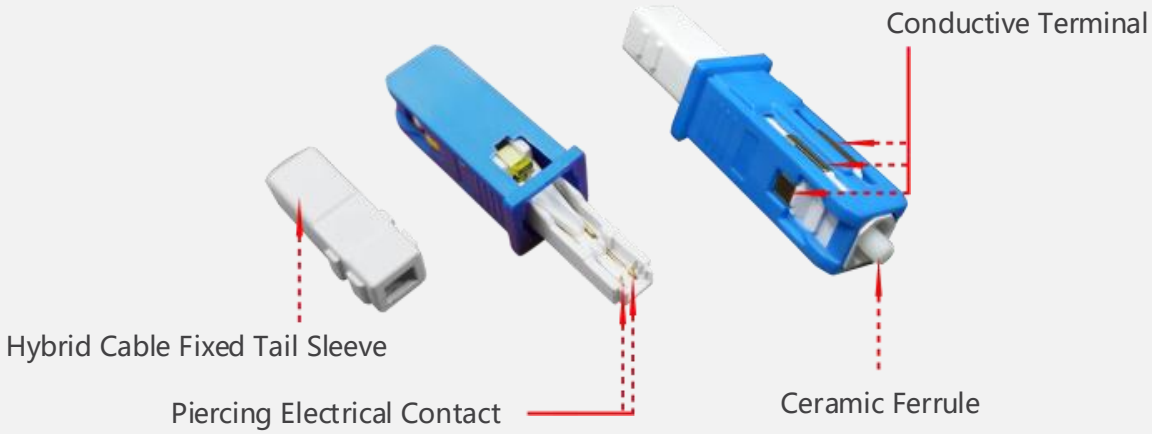
Product Features:

- Optical-electrical integration
- Ultra-simple operation , with assembly time ＜ 1 min
- Optical silicone grease protection, permanent stable fiber connection

Product Introduction:

VSOL’ s PoF-SC-MECH-1 SC-Type Mechanical Splicing Optical-Electric Hybrid Connector features an integrated optical-electric design, enabling dual functions of high-speed data transmission and remote equipment power supply simultaneously, and is suitable for the deployment requirements of indoor on-site optical-electrical hybrid cables. Adopting optical silicone grease contact protection technology, this connector achieves permanent physically stable fiber optic connection; it boasts an ultra-simple and convenient operation process without the need for professional melt-ending equipment. With a single joint assembly time of ＜1 min, rapid assembly can be completed, greatly improving construction efficiency.

Product Structure:



Product Parameter:

Insertion Loss	≦0.35dB
Return Loss	≥45dB
Tensile Strength	≥20N
Contact Protection Filler	optical silicone grease
Rated working voltage (DC)	48~56V
Rated working current (DC)	0.3A



PoF-C-B Series

Mechanical Splicing Optical-Electrical Hybrid Cable

Product Features:

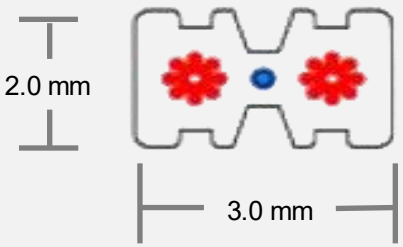
- Optical-electrical integration
- Pair with SC electrical hybrid connector for fast on-site opto-electrical connection
- Ultra-simple operation , with assembly time ＜ 1 min

Product Introduction:

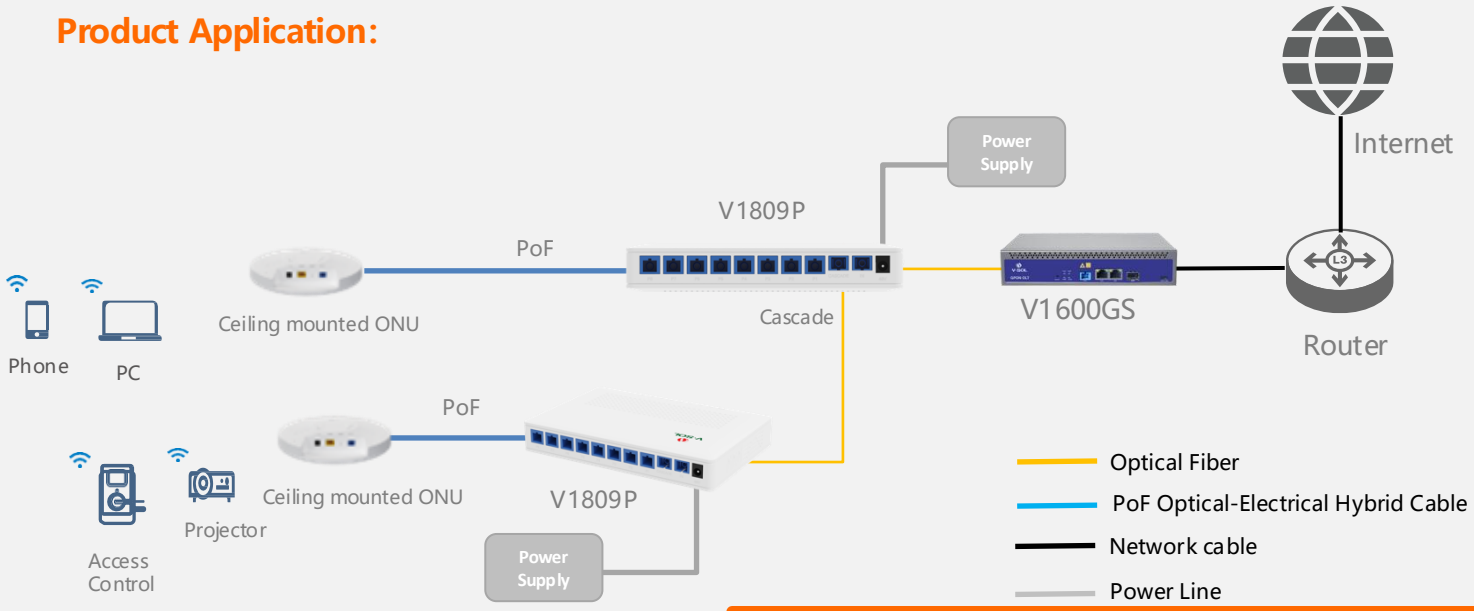
The PoF-C-B Series Mechanical Splicing Optical-Electric Hybrid Cables are available in two primary variants: PoF-C-B-1 (max transmission distance: 160 m) and PoF-C-B-2 (max transmission distance: 300 m). Combining the advantages of optical fiber and electrical cable, the series delivers simultaneous high-speed data transmission and power supply.

Paired with SC-type mechanical splicing optical-electric hybrid connectors and the matching mechanical splicing tool kit,, it enables flexible on-site splicing operations. Its design simplifies equipment installation and reduces cabling complexity, making it suitable for applications such as network access, surveillance systems, and smart home solutions.

Product Structure:



Product Application:



Product Parameter:

ITEM			Hybrid Cable Model	
			PoF-C-B-1	PoF-C-B-2
Structure & Materials	Optical Fiber		B6a2（G.657A2）1core	
	Hybrid Cable Outer Sheath		LSZH (Low Smoke Zero Halogen Flame-Retardant Polyolefin)	
Electrical Characteristics	Conductor Material		Stranded Copper	
	Center-to-Center Spacing of Conductors		1.50 ± 0.05mm	
	Conductor Specification（mm）		7*0.16	14*0.16
	Conductor Cross-Section(mm2		0.15	0.3
	Max Resistance per 100m(Ω/hm)		14.1	8.1
Aplication	Power Splitter Input Voltage（V）		54	54
	Terminal power consumption(W)		12	12
	Theoretical power supply length(m)		160	300
Cable Performance	Overall Dimension（mm）		3.0 x 2.0	
	Tensile Force (N)	Long-term	50	60
		Short-term	100	120
	Flattening Force (N/100mm)	Long-term	1100	
		Short-term	2200	
	Bending Radius（mm）	Static	18	
		Dynamic	36	
Optical Characteristics	Cable Attenuation (dB/km)	1310nm	0.38	
		1550nm	0.24	
	Fiber Macrobending Loss(MAX)(dB)	R15mm, 10 turns	0.03@1550nm 0.10@1625nm	
		R10mm, 1 turn	0.10@1550nm 0.20@1625nm	
		R7.5mm, 1 turn	0.50@1550nm 1.00@1625nm	
Application Environment	Installation Environment		Indoor	
	Operating Temperature		-10℃ ~ +60℃	
	Operation Humidity		0 % ~ 95 %（+ 40 ℃）	
	Storage Temperature		-10℃ ~ +60℃	
	Flame Retardancy		UL94 - V0	

Ordering Information:

Hybrid Cable Name	Hybrid Cable Mode	Conductor Cross-Section	Packing
Optical-electric hybrid cable	PoF-C-B-1	0.15mm²	1000 meters per roll
	PoF-C-B-2	0.3mm²	1000 meters per roll

PoF-SC-MECH-1	Suitable for 3.0*2.0mm optical-electrical hybrid cables
Mechanical Splicing tool kit	Optical-Electrical Hybrid Cable Stripper,Optical-Electrical Hybrid Cable Fiber Terminator,Coated Fiber Length-Stripping Tool