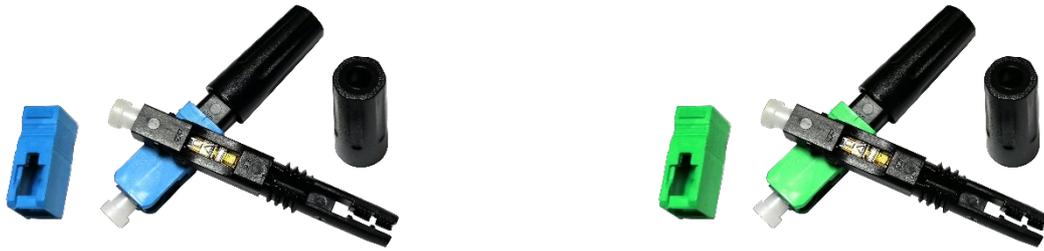


## SC-UPC / APC Optical Fiber Real-time Physical Connector



SC/UPC

SC/APC

Product overview: SC optical fiber real-time physical connector is a kind of quick connector for physical connection. It uses special optical silicone grease filling to replace the easy-to-lose matching paste. It is used for quick physical connection (not matching paste connection) of small equipment. It is matched with a group of optical fiber standard tools. It is simple and accurate to complete the standard end of optical fiber and reaching the physical stable connection of optical fiber. The assembly steps are simple and low skills required. The connection success rate of our connector is nearly 100%, and the service life is more than 20 years.

### Characteristic

Device length	50mm
Working wavelength	SM: 1310nm/1550nm
Applicable optical cable	2.0x3.0mm, 2.0mm, 3.0mm
Insertion loss	mean $\leq$ 0.3dB max $\leq$ 0.5dB
Return loss	$\geq$ 50dB (UPC) $\geq$ 55dB (APC)
End face performance	Conform to YD T 2341.1-2011
Mechanical durability	1000times
Cable tension	$\geq$ 30N
Torsion of optical cable	$\geq$ 15N
Drop performance	Allow 10 drops under 1.5m height without abnormal performance
One time assembly success rate	$\geq$ 98%
Repeatable assembly	10times
Device operating temperature	-40°C~+80°C
Hot and humid working environment	Long term operation under 90% relative humidity ,70 °C
Standard optical fiber tool replace third-party cutter	Ensure that the connector is physically and permanently docked
Drop performance of optical fiber standard tools	The end performance of 1.5m hard ground dropping by 5 times remains unchanged

### Key accessories

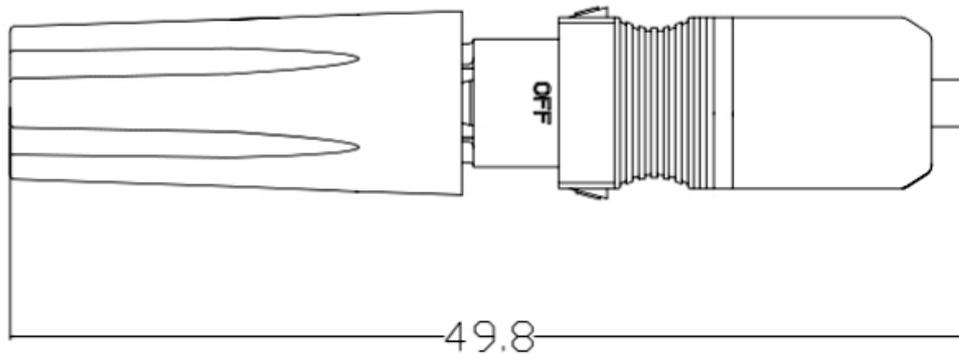
Fiber filler	Special optical silicone grease (not ordinary and easy-to-lose conventional matching paste)
Material filling quantity	0.5X1.5X3mm=2.25mm <sup>3</sup> (End face filled with 10000 times volume compared with previous generation product)
Volatilization test at -40 °C to 80 °C for 300h	Volatilization weight < 5% (40 years service life under simulation nature)

## Material, Process and Forming

Molding material	PEI、PPO、PC、PBT
Flame retardant grade	UL94 V-0

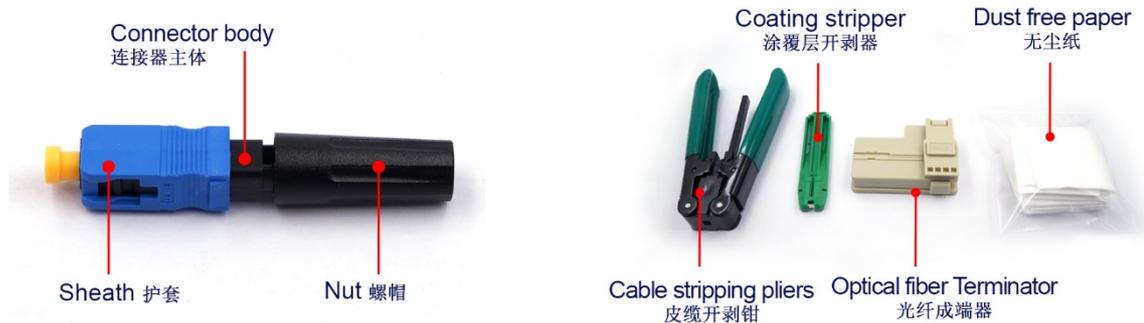
RoHS compliant products

## Outline drawing



## Devices and tools

The on-site fast SC optical fiber connector is mainly composed of sheath, main body and nut (Fig. 1). The tools required for on-site operation are distributed as shown in Fig. 2 at 200:1 (excluding cable stripping pliers ). By using the tools, referenced number of coating peeling  $\geq 1000$  times, fiber termination  $\geq 3000$  times.

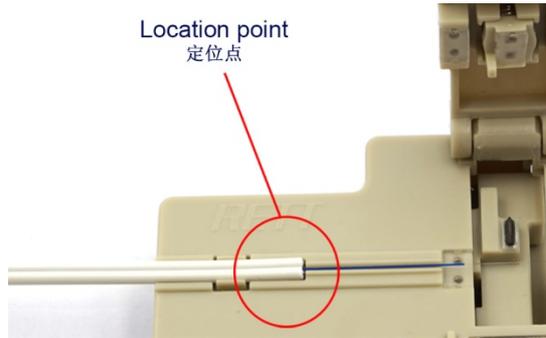


## Assembly instructions

- Fiber termination

<p>1.Insert the nut and strip the optical cable for about 40-50mm</p>	<p>2.Peel off the coating using the coating stripper.</p>
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3. Clean the optical fiber with dust-free paper, then put the optical cable into the optical fiber terminator, and complete the standard termination of optical fiber.



Note: it is necessary to use a cutter to cut the optical fiber, as shown in the figure:



After cutting, the bare fiber length shall not exceed 8mm. It can reduce rate of fiber breakage.

• Assemble

Insert the optical fiber to the positioning point, keeping the optical fiber slightly bent, and tighten the nut.



Move up the switch to connect the optical fiber, and then put on the sheath, and complete the assembly.



• Repetitive assembly

Steps: take out the sheath, open the switch, unscrew the nut and pull out the optical cable.



**For More Information:**

Email: [sales@telex.cn](mailto:sales@telex.cn)  
[www.telex.cn](http://www.telex.cn)