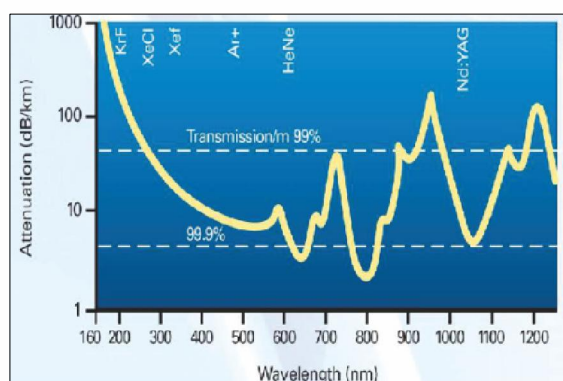


## Quartz Fiber XOP-1102/1103/1104/1105

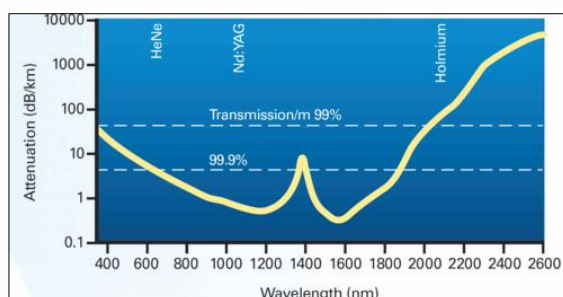
### Introduction

XOP-1102-1105 series quartz fibers are of a concentric cylindrical structure with a quartz core and a Fluorine-doped quartz cladding and coated with resin materials to enhance fiber strength. An additional sheath layer can be added to protect the fiber. XOP-1102-1105 fibers can transmit light of wide wavelength ranges and high power and are ideal choices for photometry. 200-1100nm and 400-2200nm (light wavelengths) fibers and 1-to-1 type, Y-type, 1-to-M type, and M-to-M type fibers are available. YISIXT also provides fiber (core diameter, core number, length, material, structure, and connector) customization.

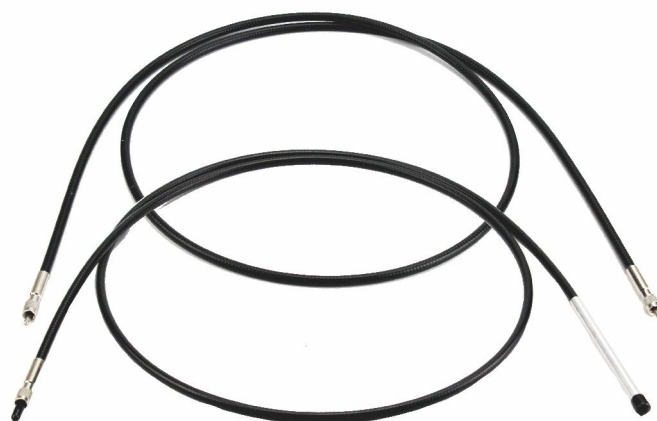
### Transmission Curve



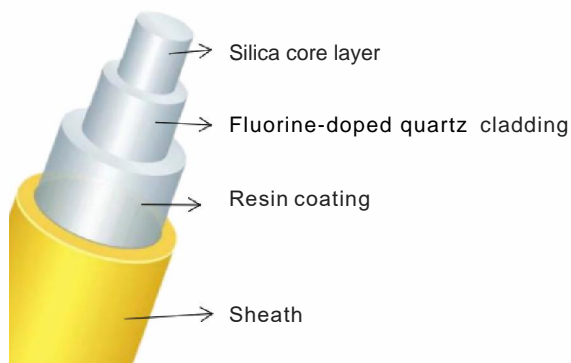
SIM-6102/SIM-6104 series, 200-1100nm



SIM-6103/SIM-6105 series, 400-2200nm



### Inner structure



### Options



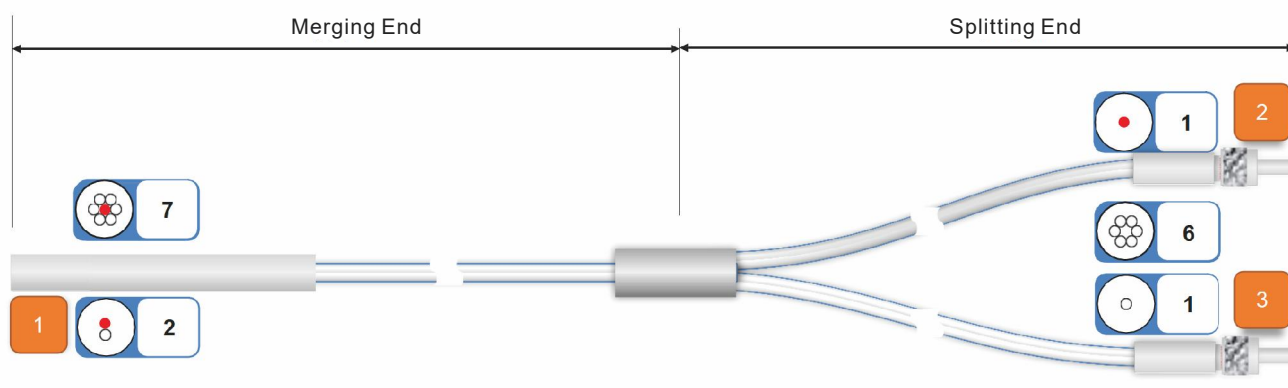
Fiber Holder [YME-2070-01]

## Quartz Fiber XOP-1102/1103/1104/1105

### Specifications

Model	XOP-1102	XOP-1103	XOP-1104	XOP-1105
Structure	1-to-1 type	1-to-1 type	Y type	Y type
Spectral Range	200-1100nm	400nm - 2200nm	200-1100nm	400-2200nm
Core Layer	Quartz			
Cladding	Fluorine-doped quartz			
Coating Layer	Acrylic resin			
Sheath Layer	Tefzel® (Teflon resin), etc.			
Core Diameter	200 / 400 / 600 / 800 / 1000 $\mu\text{m}$			
Length	5 / 50 / 100 / 150 / 200 cm, etc.			
NA	0.22 $\pm$ 0.02			
Efficiency	Single core 85% (632.8 nm), multi core 65% (632.8 nm)			
Beam sharp	Round / Square / Linear / Custom shapes			
Connector	SMA905 / SMA906 / FC / ST			
Bend Radius	150D (short time), 300D (long time), D is the core diameter			
Temperature	-40°C ~ +100°C			

### Y-type Structure



Typical 7-core Y-type fiber

## Raman Probe XOP-1131

### Introduction

XOP-1131 series Raman probes are designed for 532, 785, 830, and 1064 nm laser-induced Raman spectrum measurements. With different sampling holders, samples in solid, liquid, or powder forms can be examined. OD6 optical interference filter effectively eliminates Rayleigh signals. Pairing with semiconductor lasers and spectrometers, the XOP-1131 series has wide applications.

### Features

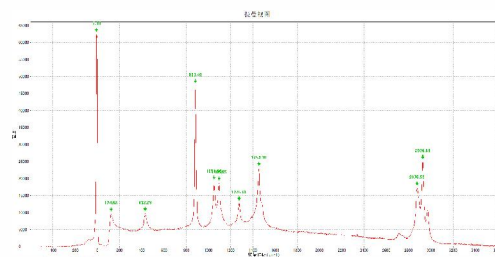
- Broader spectral range
- Good consistency
- Four wavelengths options
- OD6 filter effectively reduces the Rayleigh scattering



### Specifications

Central Wavelength (nm)	532	785	830	1064
Spectral Range (cm <sup>-1</sup> )	176 - 4000	176-3500	176-2800	200-3000
Working Method	Fiber In / Out			
Dimension (mm)	107 x 30 x 13			
Cut-off Depth	OD6			
Working Distance(mm)	7.5			
Splitting End	Core diameter 105μm, NA0.22, FC/PC or SMA905			
Merging End	Core diameter 200μm, NA0.22, SMA905			
Fiber Length(cm)	(100+30)±0.2			
Temperature(°C)	10-30			
Humidity	0-75% RH			

### Typical Data



## Immersion Fiber Probe XOP-1122

### Introduction

XOP-1122 series immersion fiber probes adopt Y-structure. Core diameter, core number, length, and connector type are customizable. The probe end can function as a small cuvette for real-time liquid sampling. XOP-1122 series probes, paired with spectrometers and light sources, are often used to measure the liquid's absorbance for water quality and biochemistry detection.

### Features

- Reflectors of different optical path lengths
- Support diameter, core number, length, and connectors customization.

### Applications

- Online water quality testing
- Online biochemical testing



### Specifications

Model	XOP-1122-0615	XOP-1122-0620
Core Diameter	600μm	
Number of cores	2	
Material	UV resistant quartz fiber	
Wavelength Range	200-1100nm	
Merging End	0.75m	1m
Splitting End	0751m	1m
Operating Temperature	-30~150 degrees	
Reflector (optional)	XOP-1122-H02, gap is 2mm XOP-1122-H05, gap is 5mm XOP-1122-H10, gap is 10mm	

## Cosine Corrector YOP-1026-01

### Introduction

YOP-1026-01 cosine corrector is used for spectral radiation sampling. It can collect the light in the 180° solid angle and solve the optical coupling problem caused by the geometric structure limitation. The YOP-1026-01 can connect optical fiber or spectrometer through a SMA905 connector. It uses PTFE material and is of 3.9mm effective diameter and 200~1100nm wavelength range. It can be used for solar radiation, LED, laser, and ambient light measurement and analysis.

### Features

- Collect light in the 180° solid angle
- PTFE material
- SMA905 connector



### Applications

- UVA & UVB solar radiation, LED, LASER, and ambient light measurement.

### Specifications

Model	YOP-1026-01
Spectral Range	200nm-1100nm
Diffusers	Material: Spectralon PTFE Diameter: 3.9mm Thickness: 1mm
Dimension	Φ6.4×17.5mm
Field of View	180°
Fiber Connector	SMA905