

OtO Photonics

Optical Fiber Datasheet



Description

OtO Photonics provides optical fibers for customers to satisfy the various needs of spectrum measurement. We offer the optical fibers with excellent optical performance, wide-band spectral transmittance, good bending and mechanical properties.

All of our Optical fibers are terminated with standard SMA-905 connector and easily to connect with OtO Photonics spectrometers, light sources and other accessories. These fibers belong to multimode step Index and are available with fused silica optical fibers.

Base on different waveband, fiber length and numerical aperture, we offer various optical fiber models as below. **OtO Photonics also offer customized products, but can not guarantee the transmittances.**

For UV-VIS Waveband Optical Fibers

- Better transmission in the UV-VIS range (200-1100 nm)
 - High OH ion concentration
 - Assembly length 1m
- ✓ OF-600-100-UVS2
 - ✓ OF-600-100-UVB2

For UV-VIS Waveband Short Optical Fibers

- Better transmission in the UV-VIS range (200-1100 nm)
 - High OH ion concentration
 - Assembly length 25.4mm & 40mm (double nut)
- ✓ OF-S-0400-UV
 - ✓ OF-S-0600-UV
 - ✓ OF-S-1000-A
 - ✓ OF-DS-1000-A

For VIS-NIR Waveband Optical Fibers

- Better transmission in the VIS-IR range (400-2200 nm)
 - Low OH ion concentration
 - Assembly length 1m
- ✓ OF-600-100-NIRS2

For VIS-NIR Waveband Short Optical Fibers

- Better transmission in the VIS-IR range (400-2200 nm)
 - Low OH ion concentration
 - Assembly length 25.4mm
- ✓ OF-S-1000-NIR

Customized Y-type Optical Fibers & Multicore Optical Fiber & Fiber Optic Transmission Dip Probe

We provide the related information between transmission and wavelength for the four situations in the figure in this guide. (Except for Customized Optical Fiber)



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■ UV-VIS waveband Optical Fibers

Model		OF-600-100-UVS2	OF-600-100-UVB2
Wavelength Range (nm)		200-1100	200-1100
Assembly Length (m)		1	1
Core Diameter (um)		600	600
Cladding Diameter (um)		630	630
Minimum Bending Radius (D=Core Diameter)	short term	100D	100D
	long term	300D	300D
Protective Coating Outer Diameter (mm)		1.2-2.0	1.2-2.0
Jacket Material		304 stainless steel	PVC
Numerical Aperture (NA)		0.22	0.22

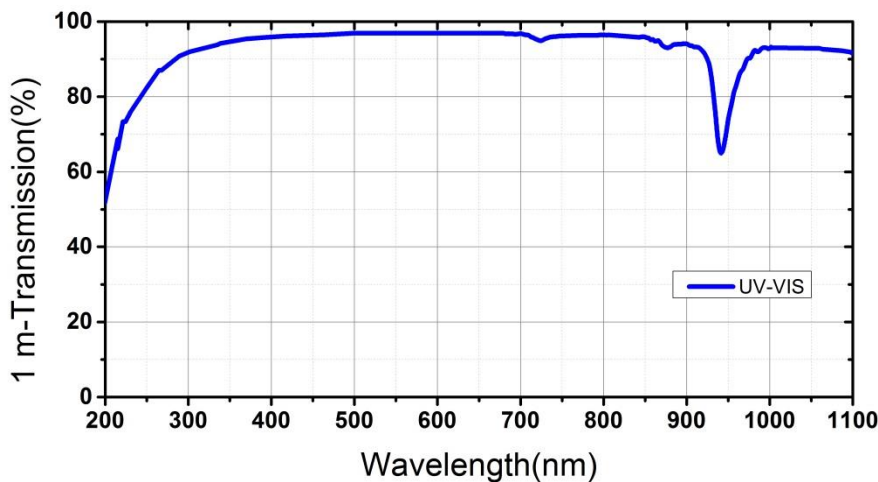


Fig.1 Transmission of UV-VIS waveband Optical Fiber @ 200~1100nm

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■ UV-VIS waveband short Optical Fibers

Model		OF-S-0400-UV	OF-S-0600-UV	OF-S-1000-A	OF-DS-1000-A
Wavelength Range (nm)		200-1100	200-1100	200-1100	200-1100
Assembly Length (m)		0.0254	0.0254	0.0254	0.04
Core Diameter (um)		400±10	600±10	1000±10	1000±10
Cladding Diameter (um)		1220	1220	1220	1220
Minimum Bending Radius (D=Core Diameter)	short term	-	-	-	-
	long term	-	-	-	-
Protective Coating Outer Diameter (mm)		-	-	-	-
Jacket Material		-	-	-	-
Jacket Material		-	-	-	-
Numerical Aperture (NA)		0.22	0.22	0.22	0.22
Remark					double nut

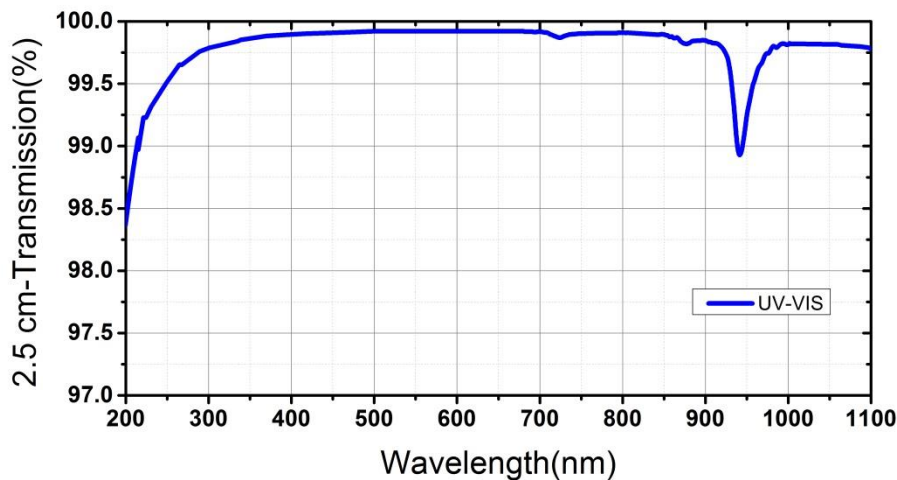


Fig.2 Transmission of UV-VIS waveband short Optical Fiber @ 200~1100nm

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■ VIS-NIR waveband Optical Fibers

Model		OF-600-100-NIRS2
Wavelength Range (nm)		400-2200
Assembly Length (m)		1
Core Diameter (um)		600
Cladding Diameter (um)		660
Minimum Bending Radius (D=Core Diameter)	short term	100D
	long term	300D
Protective Coating Outer Diameter (mm)		0.9
Jacket Material		304 stainless steels
Numerical Aperture (NA)		0.22
Remark		-

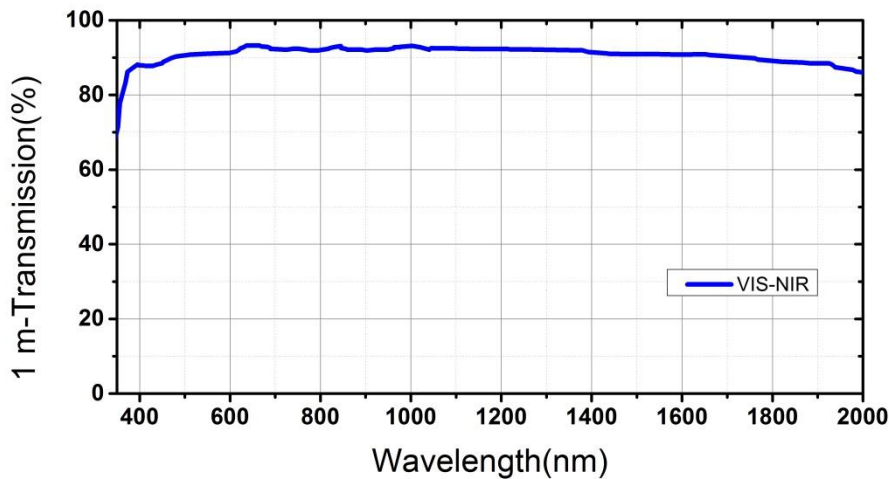


Fig.3 Transmission of VIS-IR waveband Optical Fiber @ 400~2000nm

VIS-IR waveband short Optical Fibers

Model		OF-S-1000-NIR
Wavelength Range (nm)		400-2200
Assembly Length (m)		0.0254
Core Diameter (um)		1000±10
Cladding Diameter (um)		1220
Minimum Bending Radius (D=Core Diameter)	short term	-
	long term	-
Protective Coating Outer Diameter (mm)		-
Jacket Material		-
Numerical Aperture (NA)		0.22
Remark		-

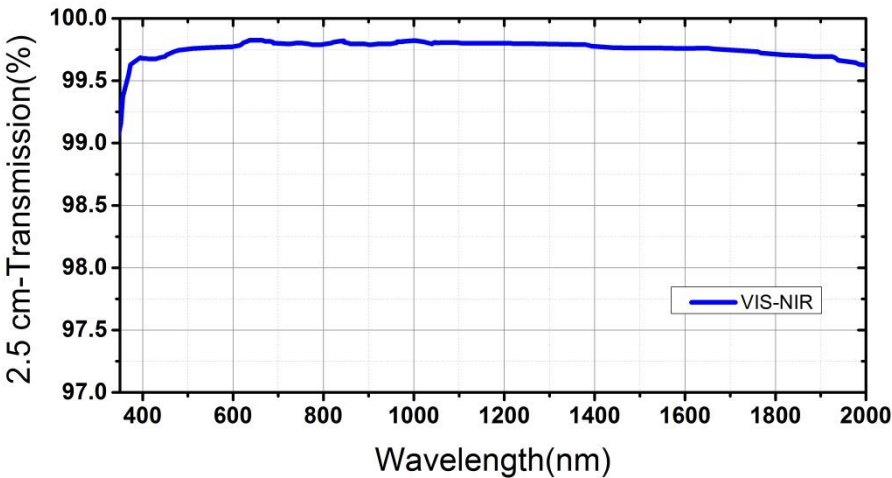


Fig.4 Transmission of VIS-IR waveband short Optical Fiber @ 400~2000nm

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■ Customized Y-type Optical Fibers

Model	OF-Y-0606-030-UNB		OF-Y-0404-030-UUB	
Wavelength Range (nm)	200-1100	400-2200	200-1100	200-1100
Assembly Length L(mm)	300		300	
Branch Length A(mm)	120		120	
Core Diameter (um)	600	600	400	400
Jacket Material	PVC		PVC	
Numerical Aperture (NA)	0.22		0.22	

The Spec of Wavelength Range, Assembly Length, Core Diameter or Jacket Material can be Customized.

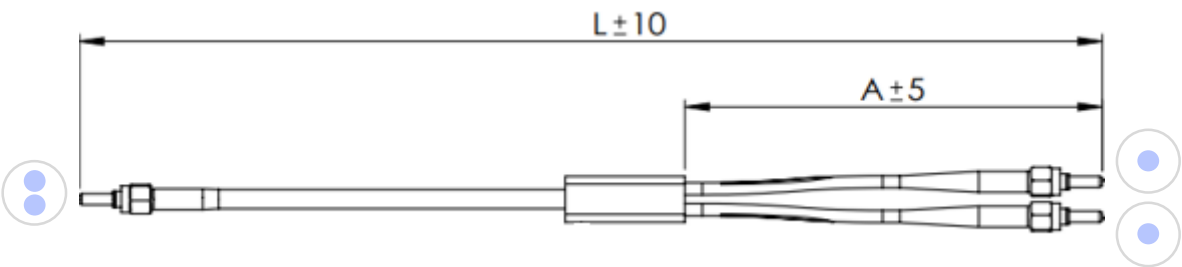


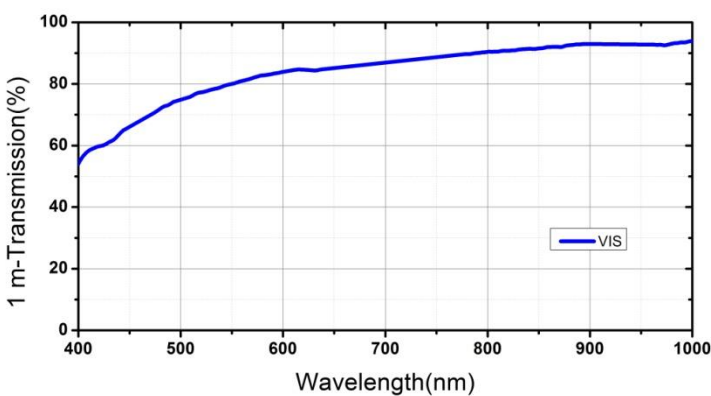
Fig.5 Schematic diagram of Y-type Optical Fiber

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■ Customized Multicore Optical Fiber

Model	OF-M50-100-VA
Wavelength Range (nm)	380-780
Assembly Length (m)	1
Core Diameter (um)	1000um (50um fabricated)
Jacket Material	304 stainless steels
Numerical Aperture (NA)	-



The Spec of Assembly Length, Core Diameter or Jacket Material can be Customized.

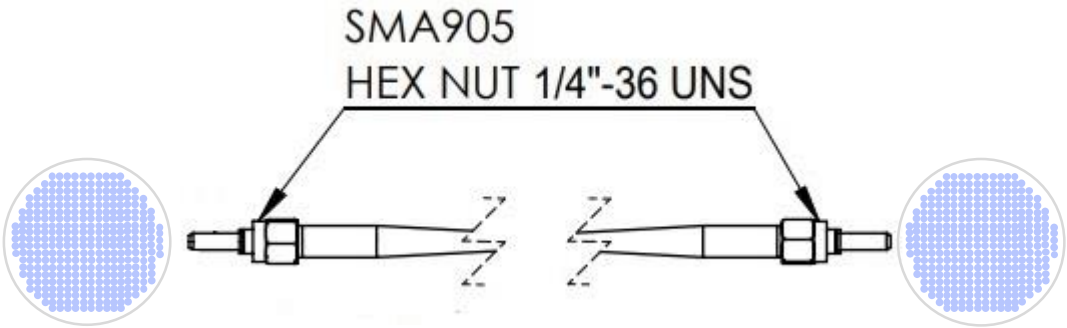


Fig.6 Schematic diagram of Customized Multicore Optical Fiber

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■ Customized Fiber Optic Transmission Dip Probe

Model	OF-YM-0404-200-UVS2	OF-YM-0404-200-NIRS2
Wavelength Rangr(nm)	200-1100	400-2200
Assembly Length (m)	2	
Core Diameter (um)	400	
Jacket Material	304 stainless steel	
Numerical Aperture (NA)	0.22	
Remark	-	

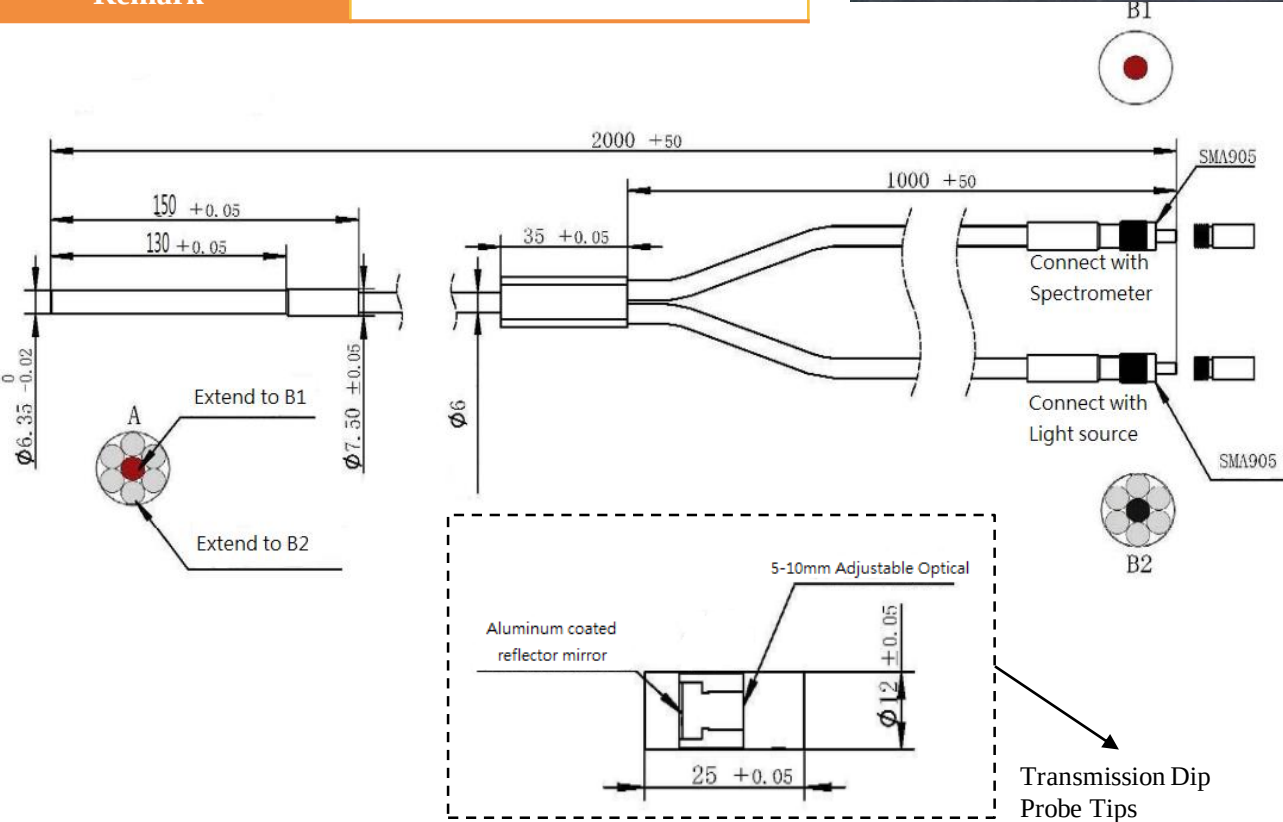


Fig.7 Schematic diagram of Customized Fiber Optic Transmission Dip Probe