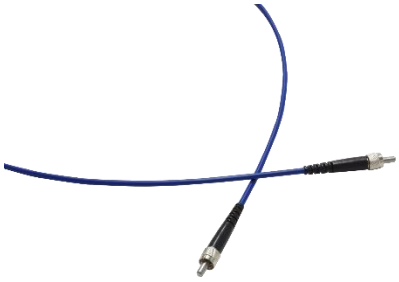
Product Specification: Optical Fiber Series

Description



The Optical Fiber Series are designed for high-performance spectrum measurement applications, offering excellent optical transmission, broad spectral coverage, and robust mechanical properties. All fibers are terminated with standard SMA-905 connectors for seamless integration with Evolve spectrometers, light sources, and accessories. Available in multimode step-index configurations with fused silica cores, these fibers are optimized for UV-VIS and VIS-IR wavebands, with options for custom lengths, diameters, and numerical apertures.

Models and Wavelength Ranges

- SB3130: 200–850nm
- UV-VIS Waveband Optical Fibers: 200–1100 nm
- UV-VIS Short Optical Fibers: 200–1100 nm
- VIS-IR Waveband Optical Fibers: 400–2200 nm
- VIS-IR Short Optical Fibers: 400–2200 nm
- Customized Y-type, Multicore, and Dip Probe Fibers: Various ranges

Main Features

- High speed 1024-pixel CMOS sensor
- High transmission in UV-VIS (200–1100 nm) and VIS-IR (400–2200 nm) ranges
- Fused silica core for superior optical performance
- Multimode step-index design
- SMA-905 connectors for universal compatibility
- Multiple assembly lengths (standard: 1 m, short: 25.4 mm, 40 mm, 0.3 m, 2 m, etc.)
- Options for high or low OH ion concentration
- Numerical aperture options: 0.22, 0.37 (selectable)
- Robust mechanical and bending properties

- Stainless steel or PVC jacket options
- Custom configurations available

Technical Details

- Optical resolution: 3 to 15 nm depending on slit/grating
- Core diameters: 400 µm, 600 µm, 1000 µm (±10 µm)
- Cladding diameters: 630 µm, 660 µm, 1220 µm
- Minimum bending radius: 100D (short term), 300D (long term)
- Protective coating outer diameter: 0.9–2.0 mm
- Jacket material: 304 stainless steel, PVC
- Numerical aperture (NA): 0.22, 0.37
- Transmission performance: >98% in specified ranges (graphs available)
- Custom Y-type, multicore, and dip probe options

Dimensions

- Standard lengths: 1 m, 0.0254 m, 0.04 m, 0.3 m, 2 m
- Core diameters: 400 µm, 600 µm, 1000 µm
- Cladding diameters: 630 µm, 660 µm, 1220 µm

Specifications

Model	Wavelength Range (nm)	Assembly Length (m)	Core Diameter (µm)	Cladding Diameter (µm)	Numerical Aperture (NA)	Jacket Material
OF-600-100-UVS	200–1100	1	600	630	0.22	304 stainless steel
OF-600-100-UVB	200–1100	1	600	630	0.22	PVC
OF-S-0400-UV	200–1100	0.0254	400 ± 10	1220	0.22	—
OF-S-0600-UV	200–1100	0.0254	600 ± 10	1220	0.22	—
OF-600-100NIRS2	400–2200	1	600	660	0.22	304 stainless steel

OF-600-100NIRS3	400–2200	1	600	660	0.37	304 stainless steel
OF-S-1000-NIR	400–2200	0.0254	1000 ± 10	1220	0.22	—
OF-Y-0606-030-UNB	200–1100	0.3	600	—	0.37	PVC
OF-Y-0404-030-UUB	400–2200	0.3	400	—	0.22	PVC
OF-M50-100-VA	380–780	1	1000 (50 fabricated)	—	—	304 stainless steel