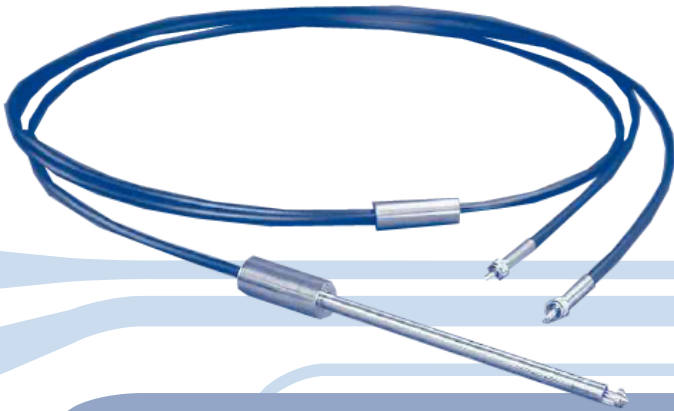


Spectrometer Accessory FDP Fiber Dip Probe

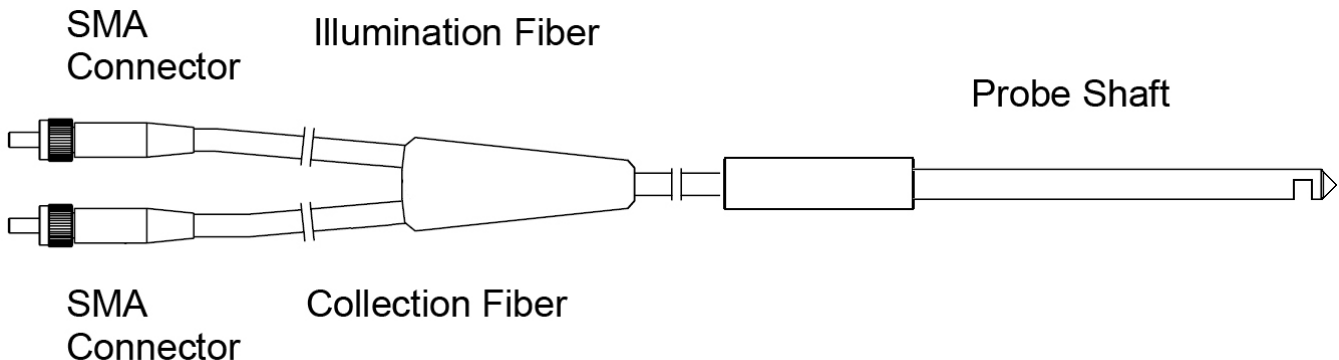
The fiber dip probe is used for measuring the transmittance and absorbance of liquid solutions. The fiber dip probe can be inserted into a beaker or other liquid container. These probes are most useful when observing changes in solutions for kinetic reaction studies or dissolution testing.

Available Models

FDP-200-0.22-1.5-UV	FDP-400-0.22-1.5-UV
FDP-200-0.22-1.5-NIR	FDP-400-0.22-1.5-NIR

Specifications:

Spectral Range	190 nm to 1100 nm
Core Diameter (μm)	200 ± 4 / 400 ± 4
Core Material	UV: Silica, UV Grade Fiber (High -OH) NIR: Pure Fused Silica
Cladding Material	Doped silica
Buffer Material	Polyimide
Jacket Material	PVC
Channel Connectors	SMA905
Sample End Ferrule	3" long x 1/4" diameter
Concentricity	$\pm 3 \mu\text{m}$
Numerical Aperture (NA)	0.22 ± 0.02
Acceptance Cone (Full Angle)	25.4 degrees
Overall Length	1.5 m
Operating Temperature	Up to $+80^\circ\text{C}$ (176°F)



Chemical Resistance:

The material of the probe shaft include 3 parts. The tube is made of stainless steel 316L SS, the window for the lens and mirror is made of silica, and the seal material is an epoxy. The table below gives a summary for the chemical resistance for these materials.

Chemical Resistance of Probe Shaft Material

(The data below constitutes recommendations only)

Chemical Environment	Window		Probe Shaft		Seal	
	Material	Resistance	Material	Resistance	Material	Resistance
Acids Weak	Silica	+	316L SS	-	Epoxy *	+
Acids Strong	Silica	+	316L SS	-	Epoxy *	±
Bases Weak	Silica	+	316L SS	+	Epoxy *	+
Bases Strong	Silica	+	316L SS	+	Epoxy *	+
Aromatic Carbons	Silica	+	316L SS	+	Epoxy *	+
Alcohols	Silica	+	316L SS	+	Epoxy *	+
Ketons/Ethers	Silica	+	316L SS	+	Epoxy *	±

- + good resistance
- ± conditional resistant
- not resistant

*special epoxy and probe have been tested for 24 hours for leakage