

## Ultra-High NA Silica Fibers

### For Fluoride and Tellurite Fiber Splicing

Fluoride optical fibers for amplifiers and lasers at 1300 nm and 1500 nm are becoming important components for optical fiber communications systems. Efficient operation of fluoride fibers requires a very high numerical aperture (typically >0.3), which unfortunately leads to increased splice losses and low return loss when connected to standard silica fibers. This splice loss decreases the overall gain and seriously degrades the noise figure. By splicing UHNA series fibers between the fluoride and standard silica fibers, these losses can be dramatically reduced.

### Price Schedule

ITEM#	PRICE/m*	\$	£	€	RMB
UHNA1	1 to 9 m	\$ 21.40	£ 14.75	€ 19,05	¥ 180.70
	10 to 49 m	\$ 17.10	£ 11.80	€ 15,20	¥ 144.40
	50 to 249 m	\$ 14.35	£ 9.90	€ 12,75	¥ 121.20
UHNA3	1 to 9 m	\$ 21.40	£ 14.75	€ 19,05	¥ 180.70
	10 to 49 m	\$ 17.10	£ 11.80	€ 15,20	¥ 144.40
	50 to 249 m	\$ 14.35	£ 9.90	€ 12,75	¥ 121.20
UHNA4	1 to 9 m	\$ 21.40	£ 14.75	€ 19,05	¥ 180.70
	10 to 49 m	\$ 17.10	£ 11.80	€ 15,20	¥ 144.40
	50 to 249 m	\$ 14.35	£ 9.90	€ 12,75	¥ 121.20

\*Call for Quantities Over 250 m

### Ultra-High NA Silica Fibers by Nufern

ITEM#*	OPERATING WAVELENGTH	MODE FIELD DIAMETER	CUTOFF WAVELENGTH	CORE COMPOSITION	ATTENUATION TYPICAL@1550 nm	NA	CLADDING	COATING	STRIPPING TOOL
UHNA1	1100 - 1600 nm	4.0 µm @ 1310 nm	1000 ± 50 nm	SiO <sub>2</sub> /GeO <sub>2</sub>	<20 dB/km	0.28	125 ± 1.5 µm	250 ± 20 µm	T06S13
UHNA3	960 - 1600 nm	3.3 µm @ 1310 nm	900 ± 50 nm	SiO <sub>2</sub> /GeO <sub>2</sub>	<20 dB/km	0.35	125 ± 1.5 µm	250 ± 20 µm	T06S13
UHNA4	1100 - 1600 nm	3.3 µm @ 1310 nm	1050 ± 50 nm	SiO <sub>2</sub> /GeO <sub>2</sub>	<20 dB/km	0.35	125 ± 1.5 µm	250 ± 20 µm	T06S13

\*The core can change up to 10 µm during the splicing process. It is increased with repeated arcing.

## Photosensitive Select Cutoff Fiber

The PS1060 photosensitive fiber is designed to provide high photosensitivity for UV radiation. It is designed for writing Fiber Bragg Gratings (FBGs) used in pump stabilizers of diodes with wavelengths in the 980 to 1060 nm range. PS1060 may also be used in coupler applications.



### Features

- High Photosensitivity
- Low Splice Loss to Transmission Fiber
- Low-Cost, High-Yield Grating Fabrication

### Applications

- Gain Flattening Filters
- Dispersion Compensators
- Pump Stabilizers

ITEM#	PRICE/m*	\$	£	€	RMB
PS1060	1 to 9 m	\$ 11.40	£ 7.85	€ 10,15	¥ 96.30
	10 to 49 m	\$ 9.10	£ 6.30	€ 8,10	¥ 76.90
	50 to 249 m	\$ 8.00	£ 5.50	€ 7,10	¥ 67.60

\*Call for Quantities Over 250 m

### Photosensitive Select Cutoff Fiber by Nufern

ITEM#	OPERATING WAVELENGTH	MODE FIELD DIAMETER	CLADDING	COATING	CUTOFF WAVELENGTH	ATTENUATION	NA	STRIPPING TOOL
PS1060	980 - 1060 nm	6.2 ± 0.8 µm @ 1060 nm	125 ± 1.5 µm	245 ± 15 µm	920 ± 50 nm	20 dB/km @ 1060 nm	0.13	T06S13

## Photosensitive Single Mode Fibers

These photosensitive fibers are highly sensitive to UV radiation, mode-matched to SMF-28e to reduce Fiber Bragg Grating (FBG) writing times associated with industry standard telecommunication fiber, and can be easily spliced to industry standard fibers. The low-loss GF1B fiber provides much higher photosensitivity than standard transmission fibers for UV radiation. The reduced attenuation allows longer length fibers to be used and reduces the insertion loss.

### Features

- Enhanced Photosensitivity
- Low Splice Loss to Transmission Fibers
- Tightly Controlled Uniformity
- >25 mm Long-Term Bend Radius
- >12 mm Short-Term Bend Radius
- >100 kpsi Proof Test Level

### Applications

- Gain Flattening Filters
- Dispersion Compensators
- Pump Stabilizers
- Fiber Lasers

ITEM#	PRICE/m*	\$	£	€	RMB
GF1	1 to 9 m	\$ 7.15	£ 4.95	€ 6,35	¥ 60.40
	10 to 49 m	\$ 6.10	£ 4.20	€ 5,45	¥ 51.50
	50 to 249 m	\$ 5.00	£ 3.45	€ 4,45	¥ 42.20
GF1B	1 to 9 m	\$ 6.10	£ 4.20	€ 5,45	¥ 51.50
	10 to 49 m	\$ 5.35	£ 3.70	€ 4,75	¥ 45.20
	50 to 249 m	\$ 4.55	£ 3.15	€ 4,05	¥ 38.50
GF1AA	1 to 9 m	\$ 19.80	£ 13.65	€ 17,60	¥ 167.20
	10 to 49 m	\$ 17.40	£ 12.00	€ 15,50	¥ 146.90
	50 to 249 m	\$ 14.85	£ 10.25	€ 13,20	¥ 125.40
GF3	1 to 9 m	\$ 30.00	£ 20.70	€ 26,70	¥ 253.20
	10 to 49 m	\$ 26.40	£ 18.20	€ 23,50	¥ 222.90
	50 to 249 m	\$ 22.50	£ 15.50	€ 20,00	¥ 189.90

\*Call for Quantities Over 250 m

### Photosensitive Optical Fiber by Nufern

ITEM#	OPERATING WAVELENGTH	MODE FIELD DIAMETER	CUTOFF WAVELENGTH	CLADDING	COATING	NA	STRIPPING TOOL
GF1	1500 - 1600 nm	9.3 ± 0.5 µm @ 1310 nm 10.5 ± 1.0 µm @ 1550 nm	1260 ± 75 nm	125 ± 1.5 µm	250 ± 20 µm	0.13	T06S13
GF1B	1550 nm	10.4 ± 0.8 µm @ 1550 nm	1260 ± 100 nm	125 ± 1.0 µm	245 ± 15 µm	0.13	T06S13
GF1AA	1500 - 1600 nm	10.5 ± 0.8 µm @ 1550 nm	1350 ± 100 nm	125 ± 1.5 µm	245 ± 20 µm	0.13	T06S13
GF3	1500 - 1600 nm	7.5 ± 0.5 µm @ 1550 nm	1350 ± 50 nm	125 ± 1.0 µm	245 ± 15 µm	0.16	T06S13