

For current pricing, please see our website.

CHAPTERS

Fiber Patch Cables

Bare Fiber

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Fiber Components

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SECTIONS

SM Fiber

PM Fiber

Doped Fiber

PCF

MM Fiber

Plastic Optical Fiber

Single Mode Fiber: 305 nm to 450 nm



SM300

NEW
product

Features

- Single Mode Transmission from 305 to 450 nm
- Negligible Photodarkening
- Dual Acrylate Coating
- Recommended Stripping Tool: T06S13 (See Page 1154)
- Shipped from Stock, No Minimums

Thorlabs' SM300 fiber consists of an undoped, pure silica core surrounded by a depressed, fluorine-doped cladding. Since these fibers do not contain germania (GeO₂), which causes electronic defects and color centers, the primary cause of photodarkening is greatly reduced. The resulting power handling in the blue region of the spectrum is increased from several milliwatts to several watts. While this fiber will exhibit some photodarkening in the UV region, it has superior performance over conventional germano-silicate fibers.

Popular Compatible Connectors (See Page 1142)

CLADDING DIAMETER	FC/PC CONNECTOR	FC/APC CONNECTOR*
125 μm	30126D1	30126K1 (Ø900 μm) 30126F1 (Ø3 mm)

*Furcation Tubing Diameter is given in Parentheses

ITEM #	OPERATING WAVELENGTH	MODE FIELD DIAMETER	CLADDING DIAMETER	COATING DIAMETER	CUTOFF WAVELENGTH	SHORT- (LONG-) TERM BEND RADIUS	ATTENUATION MAXIMUM	NA
SM300	305 - 450 nm	1.9 μm @ 305 nm 3.0 μm @ 450 nm	125 ± 1 μm	245 μm ± 5%	<300 nm	≥10 mm (≥30 mm)	<70 dB/km @ 350 nm <100 dB/km @ 450 nm	0.12 - 0.14

Do you need...



SM300 Patch Cables
See pages 1006 - 1008

ITEM #	PRICE/m*	\$	£	€	RMB
SM300	1 to 9 m	\$ 22.20	£ 15.99	€ 19.32	¥ 176.94
	10 to 49 m	\$ 18.87	£ 13.59	€ 16.42	¥ 150.40
	50 to 249 m	\$ 15.54	£ 11.19	€ 13.52	¥ 123.86

* Call for Quantities over 250 m

Single Mode Fiber: 400 nm to 600 nm

Specifications

Features

- Shipped from Stock, No Minimums
- Acrylate Coating
- Recommended Stripping Tool: T06S13 (See Page 1154)

Pure Silica Core Fibers

- Resistance to Radiation-Induced Damage and Color Center Formation
- Low Attenuation

ITEM #	S405-HP ^a	SM450	460HP	S460-HP ^a
Operating Wavelength	400 - 550 nm	450 - 600 nm ^b	450 - 600 nm	460 - 600 nm
Mode Field Diameter ^c	2.9 μm @ 405 nm 3.2 μm @ 460 nm	3.3 μm @ 488 nm 3.4 μm @ 514 nm	3.5 ± 0.5 μm @ 515 nm	3.4 ± 0.5 μm @ 460 nm
Cladding Diameter	125 ± 1 μm	125 ± 1 μm	125 ± 1.5 μm	125 ± 1 μm
Coating Diameter	245 ± 15 μm	245 ± 15 μm	245 ± 15 μm	245 ± 15 μm
Cutoff Wavelength	370 ± 20 nm	400 ± 50 nm	430 ± 20 nm	425 ± 25 nm
Short- (Long-) Term Bend Radius	≥6 mm (≥13 mm)	≥5 mm (≥25 mm)	≥6 mm (≥13 mm)	≥6 mm (≥13 mm)
Attenuation (Maximum)	≤30 dB/km @ 460 nm	<50 dB/km @ 488 nm	≤30 dB/km @ 515 nm	≤30 dB/km @ 460 nm
Numerical Aperture	0.12 ^d	0.12	0.13	0.12

^a Pure Silica Core Fibers

^b Wavelength range is illustrative and not guaranteed.

^c MFD is a nominal, calculated value, estimated at the operating wavelength(s)

^d 0.10 ≤ NA ≤ 0.14

Popular Compatible Connectors (See Page 1142)

CLADDING DIAMETER	FC/PC CONNECTOR	FC/APC CONNECTOR*
125 μm	30126D1	30126K1 (Ø900 μm) 30126F1 (Ø3 mm)

*Furcation Tubing Diameter is given in Parentheses

Would you prefer...



S405-HP and 460HP
Patch Cables

See pages 1006 - 1008

ITEM #	PRICE/m*	\$	£	€	RMB
S405-HP	1 to 9 m	\$ 13.70	£ 9.87	€ 11.92	¥ 109.19
	10 to 49 m	\$ 11.65	£ 8.39	€ 10.14	¥ 92.82
	50 to 249 m	\$ 9.59	£ 6.91	€ 8.35	¥ 76.44
SM450	1 to 9 m	\$ 9.10	£ 6.56	€ 7.92	¥ 72.53
	10 to 49 m	\$ 7.74	£ 5.57	€ 6.73	¥ 61.65
	50 to 249 m	\$ 6.37	£ 4.59	€ 5.55	¥ 50.77
460HP	1 to 9 m	\$ 10.10	£ 7.28	€ 8.79	¥ 80.50
	10 to 49 m	\$ 8.59	£ 6.19	€ 7.47	¥ 68.43
	50 to 249 m	\$ 7.07	£ 5.10	€ 6.16	¥ 56.35
S460-HP	1 to 9 m	\$ 12.40	£ 8.93	€ 10.79	¥ 98.83
	10 to 49 m	\$ 10.54	£ 7.59	€ 9.17	¥ 84.01
	50 to 249 m	\$ 8.68	£ 6.25	€ 7.56	¥ 69.18

*Call for Quantities Over 250 m