

## Fiber Optics

Passive Components

Collimation Packages

FiberBench

Optical Switches

Rackbox Systems

Connectors/  
Termination Tools

Single Mode Fiber

Rare Earth Doped

Polarization  
Maintaining Fiber

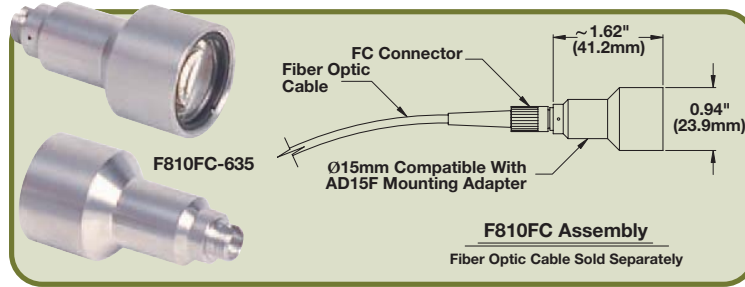
Photonic  
Crystal Fiber

Multimode Fiber:  
Graded Index

Multimode Fiber:  
Step Index

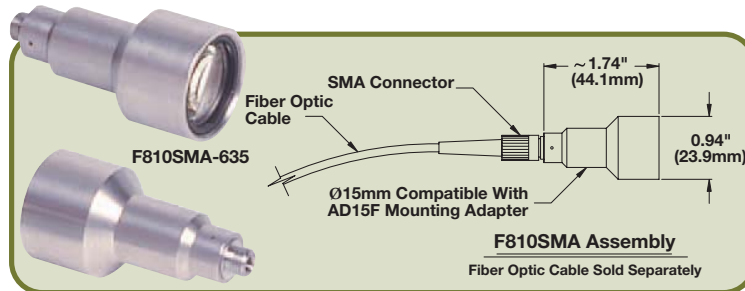
Plastic Optical Fiber

## FC and SMA Low Divergence, Large Beam Fixed Collimators



- Multi-Element Lens Design for Diffraction-Limited Performance
- Popular SMA and FC Connector Options
- Simplifies Fiber-Coupled Detection Systems

Our fiber collimation packages are designed to collimate a laser beam propagating out of the end of an optical fiber. Each fiber collimator package is factory aligned for a lens that is one focal length away from the output end of the fiber. These packages can also be used to couple a free-space laser beam into an optical fiber.



P/N SUFFIX	ALIGNMENT WAVELENGTH	ALIGNMENT FIBER <sup>1</sup>
-543	543nm	460HP
-635	635nm	SM600
-780	780nm	780HP
-1064	1064nm	SM940
-1310	1310nm	SMF-28E
-1550	1550nm	SMF-28E

See Page 190 for AD15F Mounting Adapter

### FC/PC Air-Spaced Doublet Collimators

ITEM#	\$	£	€	RMB	AR COATING	D <sup>2</sup>	θ <sup>3</sup>	NA <sub>LENS</sub>	F (mm)
F810FC-543	\$ 201.90	£ 127.20	€ 187.80	¥ 1,928.10	420-650nm	6.8mm	0.006°	0.26	34.7
F810FC-635	\$ 201.90	£ 127.20	€ 187.80	¥ 1,928.10	420-650nm	6.6mm	0.007°	0.25	35.3
F810FC-780	\$ 201.90	£ 127.20	€ 187.80	¥ 1,928.10	650-1050nm	7.1mm	0.008°	0.25	35.9
F810FC-1064	\$ 201.90	£ 127.20	€ 187.80	¥ 1,928.10	1050-1620nm	8.5mm	0.009°	0.25	36.5
F810FC-1310	\$ 201.90	£ 127.20	€ 187.80	¥ 1,928.10	1050-1620nm	6.6mm	0.014°	0.24	36.8
F810FC-1550	\$ 201.90	£ 127.20	€ 187.80	¥ 1,928.10	1050-1620nm	7.0mm	0.016°	0.24	37.0

### SMA Air-Spaced Doublet Collimators

ITEM#	\$	£	€	RMB	AR COATING	D <sup>2</sup>	θ <sup>3</sup>	NA <sub>LENS</sub>	F (mm)
F810SMA-543	\$ 201.90	£ 127.20	€ 187.80	¥ 1,928.10	420-650nm	6.8mm	0.006°	0.26	34.7
F810SMA-635	\$ 201.90	£ 127.20	€ 187.80	¥ 1,928.10	420-650nm	6.6mm	0.007°	0.25	35.3
F810SMA-780	\$ 201.90	£ 127.20	€ 187.80	¥ 1,928.10	650-1050nm	7.1mm	0.008°	0.25	35.9
F810SMA-1064	\$ 201.90	£ 127.20	€ 187.80	¥ 1,928.10	1050-1620nm	8.5mm	0.009°	0.25	36.5
F810SMA-1310	\$ 201.90	£ 127.20	€ 187.80	¥ 1,928.10	1050-1620nm	6.6mm	0.014°	0.24	36.8

### FC/APC Air-Spaced Doublet Collimators

ITEM#	\$	£	€	RMB	AR COATING	D <sup>2</sup>	θ <sup>3</sup>	NA <sub>LENS</sub>	F (mm)
F810APC-780	\$ 232.80	£ 146.70	€ 216.50	¥ 2,223.20	650-1050nm	7.1mm	0.008°	0.25	35.9
F810APC-842	\$ 232.80	£ 146.70	€ 216.50	¥ 2,223.20	650-1050nm	7.0mm	0.008°	0.25	35.9
F810APC-1310	\$ 232.80	£ 146.70	€ 216.50	¥ 2,223.20	1050-1620nm	6.6mm	0.014°	0.24	36.8
F810APC-1550	\$ 232.80	£ 146.70	€ 216.50	¥ 2,223.20	1050-1620nm	7.0mm	0.016°	0.24	37.0

1) See data on AR Coatings at [www.thorlabs.com](http://www.thorlabs.com)

2) Measured 1/e<sup>2</sup> diameter at 1 focal length from lens; fibers: 460HP (-A), SM600 (-B), SMF-28e (-C and -1550)

3) Calculated full angle of divergence; fibers: 460HP (-A), SM600 (-B), SMF-28e (-C and -1550)

## AR Coated (One End) Fiber Patch Cables

- Ideal for use With Our Collimation Packages to Minimize Fresnel Losses
- SMF-28e Fiber, 1m Length (Cutoff Wavelength <1260nm)
- AR Coated FC/PC Connector (One End):  
R <0.5%, 1300nm ± 100nm or 1550nm ± 100nm
- Uncoated FC/PC or FC/APC Input Connector

ITEM#	\$	£	€	RMB	DESCRIPTION
P1-SMF28-FC-1-13	\$ 82.40	£ 51.90	€ 76.60	¥ 786.90	FC/PC AR Coated to FC/PC, 1300nm
P1-SMF28-FC-1-15	\$ 82.40	£ 51.90	€ 76.60	¥ 786.90	FC/PC AR Coated to FC/PC, 1550nm
P5-SMF28-FC-1-13	\$ 94.40	£ 59.50	€ 87.80	¥ 901.50	FC/PC AR Coated to FC/APC, 1300nm
P5-SMF28-FC-1-15	\$ 94.40	£ 59.50	€ 87.80	¥ 901.50	FC/PC AR Coated to FC/APC, 1350nm

