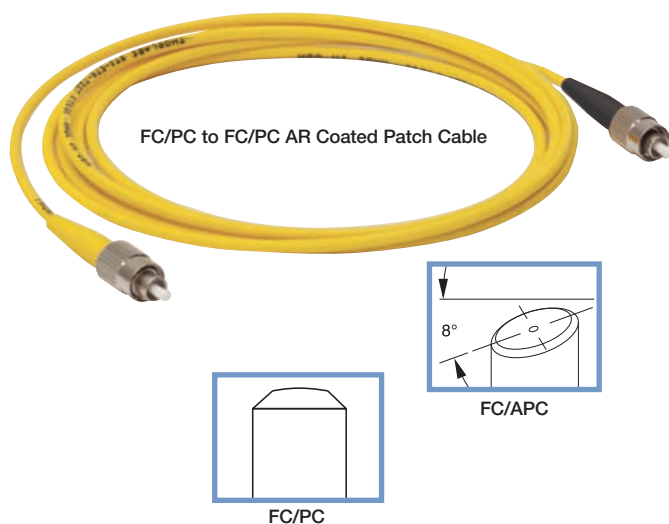


Single Mode Patch Cables: AR Coated

NEW
products



Features

- Ideal for Fiber to Free-Space Applications
- One AR-Coated FC/PC Connector Maximizes Return Loss
- One FC/PC or FC/APC Uncoated Connector
- Connectors Feature 2 mm Narrow Keys
- SMF-28e+ Fiber
- AR Coating: $R < 0.5\%$ at One of Two Wavelengths
 - 1310 ± 100 nm
 - 1550 ± 100 nm
- Ø3 mm Yellow Furcation Tubing
- Insertion Loss
 - FC/PC: 0.3 dB (Typical)
 - FC/APC: 0.2 dB (Typical)
- Return Loss (Fiber-to-Fiber Uncoated Connector)
 - FC/APC: 60 dB (Typical)
- Length Tolerance: $+7.5/-0$ cm

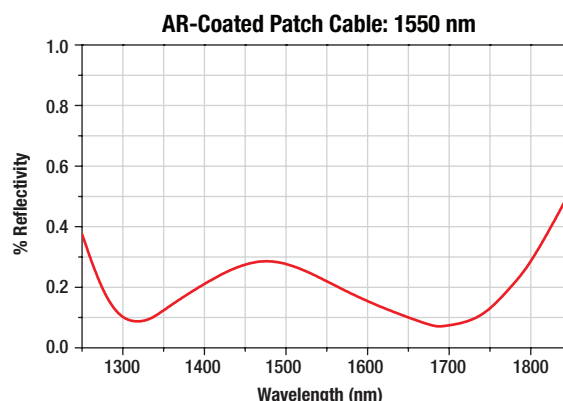
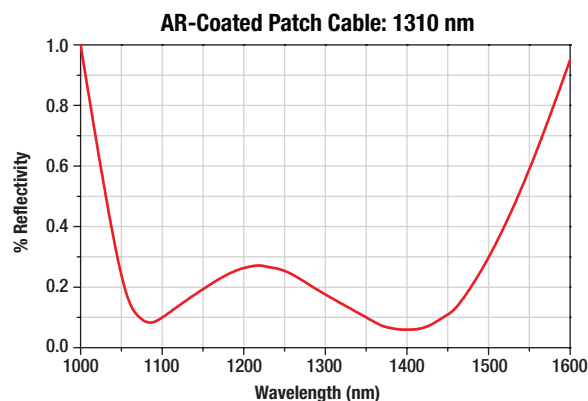
These are our stock AR-coated fiber patch cables with an AR coated FC/PC connector on one end and either an uncoated FC/PC or FC/APC connector on the other end. The FC/PC connector with the black boot is AR coated for either 1310 nm or 1550 nm, making these cables ideal for fiber to free-space applications. The other connector is uncoated. Note that the AR-coated end is meant for free-space applications (e.g., collimation) and will be damaged if it comes into contact with another connector tip. All of the cables on this page feature Ø3 mm furcation tubing, which provides Kevlar threads within the tubing to protect the fiber optic.

Fiber to Free-Space Return Loss Example

The P1-SMF28E-1-15 has an AR coating centered at 1550 nm. From the typical 1550 nm AR coating plot below, the reflectivity of the connectorized end at 1550 nm is 0.22%. Hence

$$\text{Return Loss} = 10\log(1/0.0022)$$

This results in a return loss of 26.6 dB at 1550 nm. In comparison, an uncoated FC/PC fiber would have a return loss of approximately 14.0 dB.



FIBER	OPERATING λ	CUTOFF λ	MFD	CLADDING	NA
SMF-28e+ (Page 1023)	1260 – 1620 nm	<1260 nm	$9.2 \pm 0.4 \mu\text{m}$ (@1310 nm) $10.4 \pm 0.5 \mu\text{m}$ (@1550 nm)	$125 \pm 0.7 \mu\text{m}$	0.14

ITEM #	AR COATING	AR-COATED CONNECTOR	CONNECTOR	UNCOATED LENGTH	\$	£	€	RMB
P1-SMF28E-FC-1-13	1310 nm	FC/PC	FC/PC	1 m	\$ 88.00	£ 63.36	€ 76.56	¥ 701.36
P1-SMF28E-FC-1-15	1550 nm	FC/PC	FC/PC	1 m	\$ 88.00	£ 63.36	€ 76.56	¥ 701.36
P5-SMF28E-FC-1-13	1310 nm	FC/PC	FC/APC	1 m	\$ 93.30	£ 67.18	€ 81.17	¥ 743.60
P5-SMF28E-FC-1-15	1550 nm	FC/PC	FC/APC	1 m	\$ 93.30	£ 67.18	€ 81.17	¥ 743.60