

aeroGUIDE Patch Cords

Terminated single mode and large mode area photonic crystal fibers



- Endlessly single mode fibers
- Various fiber and termination options
- Large mode area fibers
- Polarization maintaining fibers
- Sealed ends with beam expansion
- Protective furcation tubing
- *aeroGUIDE POWER* for high power applications

The line of *aeroGUIDE* PCF patch cords includes some of our most popular fibers used for transport and delivery. These fibers offer performance beyond conventional fibers, with endlessly single mode operation, large mode area for high power handling and low nonlinearities, superior beam quality, low loss, and polarization maintaining features. The fiber ends are sealed and connectorized, offering a hermetic and robust end treatment. For high power applications, the *aeroGUIDE POWER* terminations include end-capping and SMA-905 high power connectors.

These patch cords are offered in several standard configurations, and are off-the-shelf for reduced lead times. Please contact us if you are interested in an alternative configuration.

Applications

- Single-mode transport and delivery
- Multi-wavelength transmission
- Mode filtering
- Short pulse and high power delivery



End sealing and end-caps

As a part of the connectorization process, the fiber is hermetically sealed at the end. This can be done by collapsing the microstructure (traditional sealing) or by splicing on a pure silica end-cap with the same diameter as the fiber itself. The sealing causes the mode to diverge towards the end facet, resulting in a higher damage threshold of the fiber due to the lower intensity on the facet.

Highest damage threshold for the *POWER* series is obtained with the end-caps as pure silica that can be polished to a damage threshold close to the bulk damage threshold of the fiber itself — even without beam expansion.

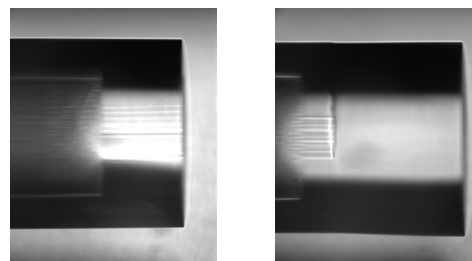


Photo of sealed fiber (left) and fiber with end-cap (right)

Configuration Parameters

	<i>aeroGUIDE</i> -5-PM	<i>aeroGUIDE</i> -5-PM-A	<i>aeroGUIDE</i> -8	<i>aeroGUIDE</i> -8-A	<i>aeroGUIDE POWER</i> -15-PM
Fiber Type*	LMA-PM-5	LMA-PM-5	LMA-8	LMA-8	LMA-PM-15
MFD	4.3 μm	4.3 μm	7.3 μm	7.3 μm	12.7 μm
Fiber Length	5.0 \pm 0.01 m	5.0 \pm 0.01 m	5.0 \pm 0.01 m	5.0 \pm 0.01 m	5.0 \pm 0.01 m
Termination*	End seal + FC/PC	End seal + FC/APC 8 \pm 1°	End seal + FC/PC	End seal + FC/APC 8 \pm 1°	End cap + SMA-905 5 \pm 1°
Tubing	3 mm loose tube	3 mm loose tube	3 mm loose tube	3 mm loose tube	Square lock steel

* Please refer to the individual fiber and termination product sheets for detailed specifications

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