

# AEROGUIDE

## Broadband fiber delivery



## CONNECTORIZED PCF FOR TRANSPORT AND DELIVERY

### Ideal for single-mode transport and delivery

The aeroGUIDE PCF cables are based on our popular Large Mode Area fibers designed for optical beam transport and delivery.

Get performance beyond conventional fibers, such as broadband single-mode operation, large mode area for high power handling and low non-linearities, superior beam quality, low loss, and polarization maintaining features.

### Applications

- Single-mode transport and delivery
- Multi-wavelength transmission
- Broadband delivery
- Mode filtering

# MODELS

## Find your favorite model

Based on our LMA-PM-5, LMA-8, LMA-PM-10, and LMA-PM-15 fibers, our aeroGUIDE variants offer different mode field diameters and wavelength ranges.

Model	Mode field diameter @ 532 nm	Recommended wavelength range
aeroGUIDE-PM-5	4.2 ± 0.5 μm	400 - 1500 nm
aeroGUIDE-8	7.2 ± 1 μm	400 - 2000 nm
aeroGUIDE-PM-10	8.4 ± 1 μm	450 - 2000 nm
aeroGUIDE-PM-15	12.2 ± 1.5 μm	500 - 2000 nm

## Features

- Truly single-mode fiber
- 400-2000 nm guidance in one fiber
- Sealed ends with beam expansion
- Wavelength independent MFD
- Pure silica fiber

# SPECIFICATIONS

## Optical

Model	aeroGUIDE-PM-5	aeroGUIDE-8	aeroGUIDE-PM-10	aeroGUIDE-PM-15
LMA fiber	LMA-PM-5	LMA-8	LMA-PM-10	LMA-PM-15
Single-mode cut-off wavelength	None	None	None	None
Recommended wavelength range [nm]	400 - 1500	400 - 2000	450 - 2000	500 - 2000
NA (1/e <sup>2</sup> )				
@ 405 nm	0.055 ± 0.02			
@ 532 nm		0.045 ± 0.02	0.045 ± 0.02	0.030 ± 0.02
@ 808 nm	0.100 ± 0.02			
@ 1064 nm		0.085 ± 0.02	0.080 ± 0.02	0.055 ± 0.02
Polarization extinction ratio [dB] @ 532 nm	> 18	-	> 18	> 18

## Mechanical

Model	aeroGUIDE-PM-5	aeroGUIDE-8	aeroGUIDE-PM-10	aeroGUIDE-PM-15
Fiber length [m] (+0.2/-0.0)	2.0 / 5.0	5.0	5.0 / 10.0	2.0 / 5.0 / 10.0
Termination	FC/APC	FC/APC	FC/APC	FC/APC
Facet angle [°]	8.0 ± 0.5	8.0 ± 0.5	8.0 ± 0.5	8.0 ± 0.5
Tubing	3 mm kevlar reinforced furcation tube			

All NKT Photonics fiber products are produced under our quality management system certified in accordance with the ISO 9001:2015 standard.

