

# LMA-8

## Single-Mode 8 $\mu\text{m}$ Core Fiber

- Low fiber loss from 400 nm to 1700 nm
- Single-mode at all wavelengths
- Radiation hard pure silica fiber
- Wavelength independent MFD

This single-mode photonic crystal fiber is optimized to exhibit low loss across the widest possible wavelength region from 400 nm to above 1700 nm while keeping an almost constant mode field diameter.

The fiber is endlessly single-mode with no higher order mode cut-off and delivers pristine mode quality at all wavelengths.

The fiber has a standard 125  $\mu\text{m}$  outer diameter and is compatible with all common fiber tools.

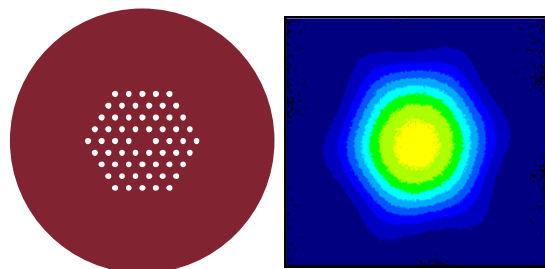
Optical properties	
Single mode cut-off wavelength*	None
Attenuation @ 532 nm	< 20 dB/km
Attenuation @ 632 nm	< 10 dB/km
Attenuation @ 1064 nm	< 5 dB/km
Mode field diameter @ 532 nm ( $1/e^2$ )	$7.2 \pm 0.5 \mu\text{m}$
Mode field diameter @ 1064 nm ( $1/e^2$ )	$7.5 \pm 0.5 \mu\text{m}$
NA @ 1064 nm (5%)	$0.14 \pm 0.02$
Physical properties	
Core diameter	$8.6 \pm 0.5 \mu\text{m}$
Outer cladding diameter, OD	$125 \pm 5 \mu\text{m}$
Coating diameter	$245 \pm 10 \mu\text{m}$
Core and cladding material	Pure silica
Coating material, single layer	Acrylate
Coating concentricity	< 10 $\mu\text{m}$
Proof test level	0.5 %

Standard interfacing options	
FC/PC connector	$0.0 \pm 0.5$ deg angle
FC/APC connector	$8.0 \pm 0.5$ deg angle
Collapse and cleave	$0.0 \pm 0.5$ deg angle

All interfaces are provided with a  $150 \pm 25 \mu\text{m}$  sealing length of the PCF structure.

Please contact us for other custom interfacing options.

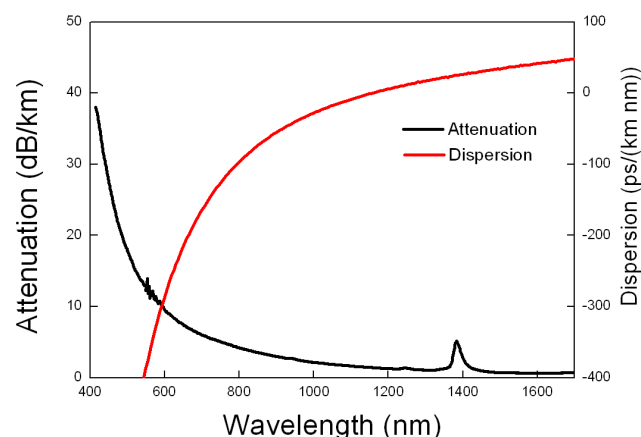
\* TIA-455-80-C standard



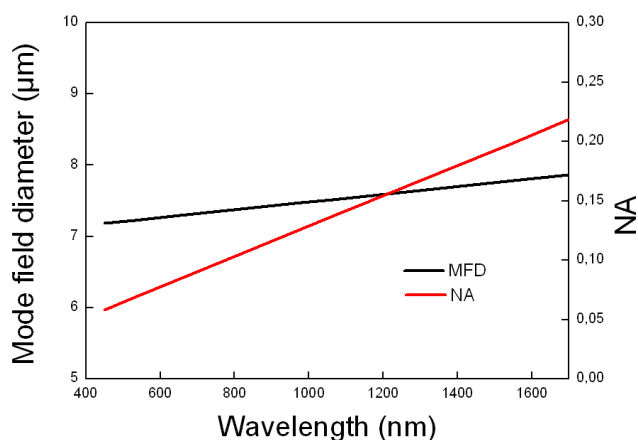
### Applications

- Single-mode delivery and pigtailling
- RGB transmission
- Mode filtering
- Short pulse delivery

### Typical spectral attenuation and dispersion



### Typical MFD and dispersion



LMA-8-111222