

Photonic Crystal Fiber HC-PCF-01

Description:

In an anti-resonant hollow core fiber, light is guided in and propagates along its air core. Owing to the purpose-designed microstructured cladding, light is confined inside the hollow core based on photonic bandgaps, rather than total internal reflections. Therefore nonlinear effects are significantly reduced. This type of fibers is best suited for high power/energy laser beam delivery with extremely low nonlinear effects, without material damage. Optional cable module with sealed fiber ends for practical solutions.

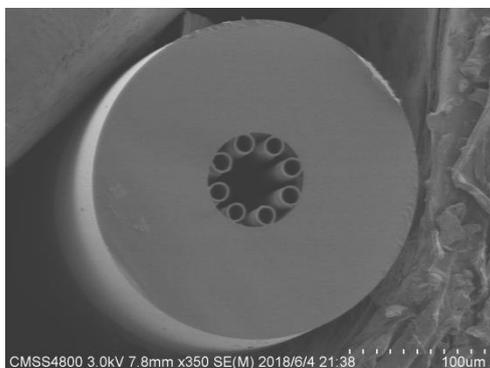
Key Features:

- Single mode delivery
- Low loss within bandgaps
- Robust against bends
- High nonlinear thresholds
- Can be filled with gas or liquids

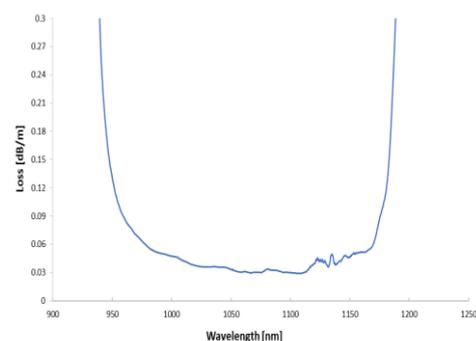
Applications:

- High power beam delivery
- Gas cell fiber lasers
- Fiber sensing
- Dispersion compensation
- Deep UV, Attosecond lasers

Cross section view:



Typical attenuation spectrum:



Specifications:

OPTICAL PROPERTIES	
Operating wavelength	980-1180nm
Transmission Bandwidth	>100nm
Attenuation @ 980nm	<100 dB/km
Attenuation @ 1030nm	<50 dB/km
Attenuation @ 1060nm	<45 dB/km
PHYSICAL PROPERTIES	
Material	Pure silica
Core diameter	38±2 μm
Cladding diameter	230±5 μm
Coating diameter	420±15 μm