

Nd Doped | Fibers

For fiber laser between 890 - 1060 nm

iXblue Photonics Neodymium Aluminosilicate double clad fibers have been developed to maximize fiber efficiency through a precisely controlled host composition. Compared to a standard Neodymium fiber, the 1.06-micron emission is reduced through careful fiber design optimization.

Our double clad fibers are routinely tested to various parameters such as photodarkening and environmental behavior.

Key Features

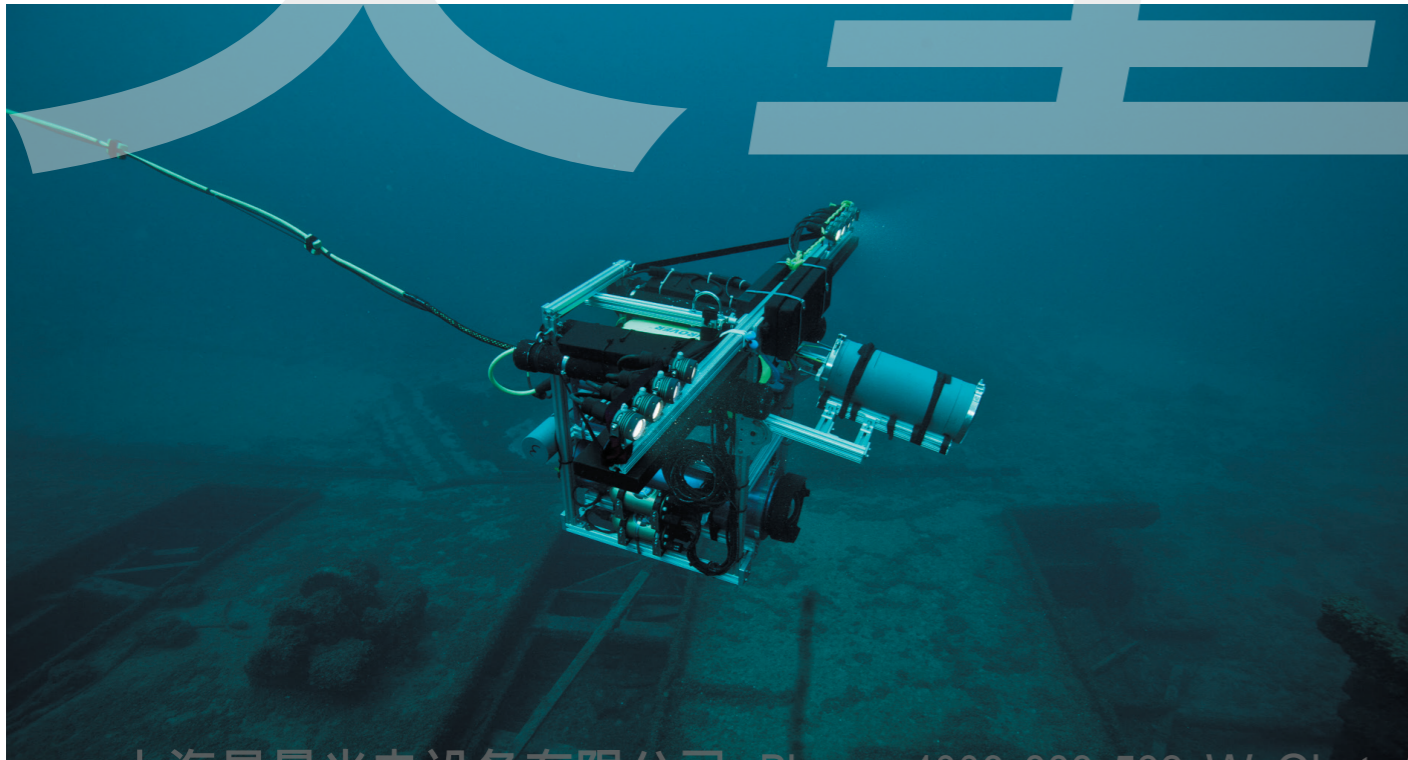
- Host composition optimized for high energy efficiency and low clustering
- Low splicing losses
- High NA, High performance low-index cladding
- Low background losses
- Low macrobending losses at operating wavelength

Applications

- 0.9 to 1.064 μm fiber lasers

Related Products

- Matched passive fiber
- Matched fiber combiner
- Associated fiber bragg mirror



Main Specifications

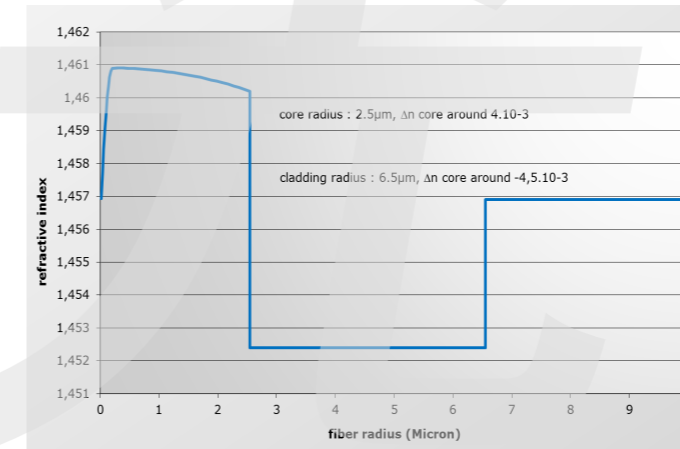
Product Name	Core diameter (μm)	Core NA	Clad absorption @ 800 nm (dB/m)	Cladding diameter (μm)	Coating diameter (μm)	Multimode clad shape
IXF-2CF-ND-O-5-125-D	4 +/- 0.5	0.14	> 0.15	125 +/- 3	245 +/- 15	Octagonal
Polarization Maintaining Fibers:						
IXF-2CF-ND-PM-5-80-W*	5 +/- 0.5	0.16	> 0.35	80 +/- 3	170 +/- 15	Panda
IXF-2CF-ND-PM-20-80-V2*	20 +/- 2	0.065	2.3	80 +/- 3	170 +/- 10	Panda

* Associated passive fibers, as well as a fiber combiners adapted to this fiber are available

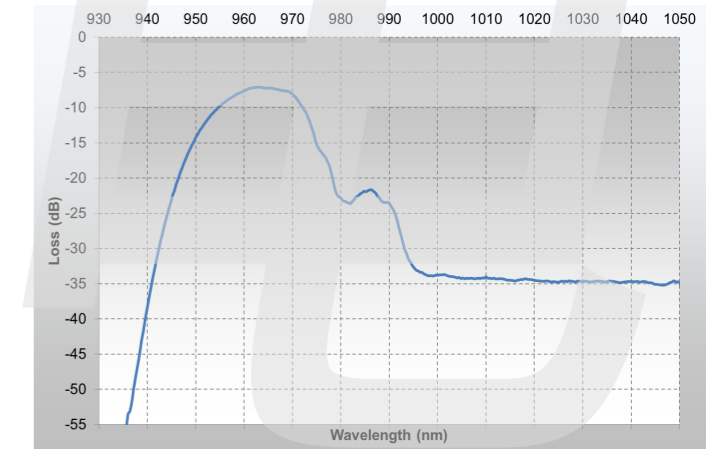
Common specifications

- MM background (dB/km): < 50
- Cladding NA: ≥ 0.46
- Core-clad offset (μm): < 1.0
- Proof test level (kpsi): 100
- LP01 cutoff wavelength (μm): 1
- Operating wavelength (nm): 900 - 950

Typical Refractive Index Profile



LP01 cutoff



Matching Fiber Combiner

Product Name	Number of MM port	Pump signal transmission (%)	Signal transmission (%)	PER (dB)	Maximum pump signal power (W)
IXS-COMB-PM-2+1-1-4-80-P*	2	75	93	19	15
IXS-COMB-PM-2-1-1-20-80-P*	2	75	95	> 18	> 30

* Panda PM design