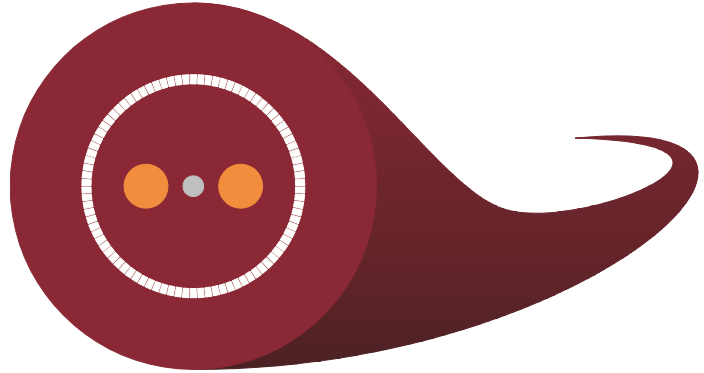


DC-135/14-PM-YB

Single-mode Polarization-Maintaining Double-Clad Ytterbium Gain Fiber

- Truly single-mode
- Large 15 μm MFD
- Solid step-index
- Polarization-maintaining
- High NA pump cladding
- High pump absorption



Applications

- Pulsed fiber amplifiers (fs, ps, ns)

The DC-135/14-PM-Yb fiber is a truly single-mode, all-solid-core step-index gain fiber. Based on unique refractive index control, the 14 μm polarization maintaining core delivers diffraction limited output in a single-mode covering the entire Yb emission bandwidth. The mode quality does not depend on coiling and is stable over time.

The multimode pump light is guided by our proven airclad technology, ensuring high reliability, high damage threshold and large numerical aperture (NA); the large NA relaxes tolerances on coupling optics.

The fiber is spliceable with commercially available pump/signal combiners.

Optical specifications

Cutoff	$\leq 1000 \text{ nm}$
Mode field diameter ($1/e^2$)	$15 \mu\text{m} \pm 1 \mu\text{m}$
Birefringence	1.0×10^{-4} (nominal)
Pump cladding NA (FWHM @ 950 nm)	≥ 0.5
Cladding absorption @ 915nm	$2.30 \text{ dB/m} \pm 0.35 \text{ dB/m}$
Cladding absorption @ 976nm	$\sim 7 \text{ dB/m}$ (nominal)

Geometrical & mechanical specifications

Core diameter	$14 \mu\text{m}$
Pump cladding diameter	$135 \mu\text{m} \pm 3 \mu\text{m}$
Outer diameter	$275 \mu\text{m} \pm 8 \mu\text{m}$
Coating diameter	$360 \mu\text{m} \pm 15 \mu\text{m}$
Coating material	High temperature acrylate
Minimum bending diameter	18 cm

All NKT Photonics products are produced under our quality management system certified in accordance with the ISO 9001:2008 standard.



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