

PM-1550

Single-mode, polarization-maintaining fiber

Single-mode, PM fiber with short beat length

Ideal for interferrometers

The PM-1550 has a strong form-birefringence and is optimized to create a short beat length between the polarizations.

It has a reduced bend-coupling between polarization states, an improved polarization extinction ratio, and is 30 times less temperature sensitive than conventional high-birefringence fiber.

Low loss and constant mode field diameter

The fibers present a low-loss in the 600 to 1700 nm window.

Standard 125 μm outer diameter

The fiber has a standard 125 μm outer diameter and is compatible with all common fiber tools.

Features

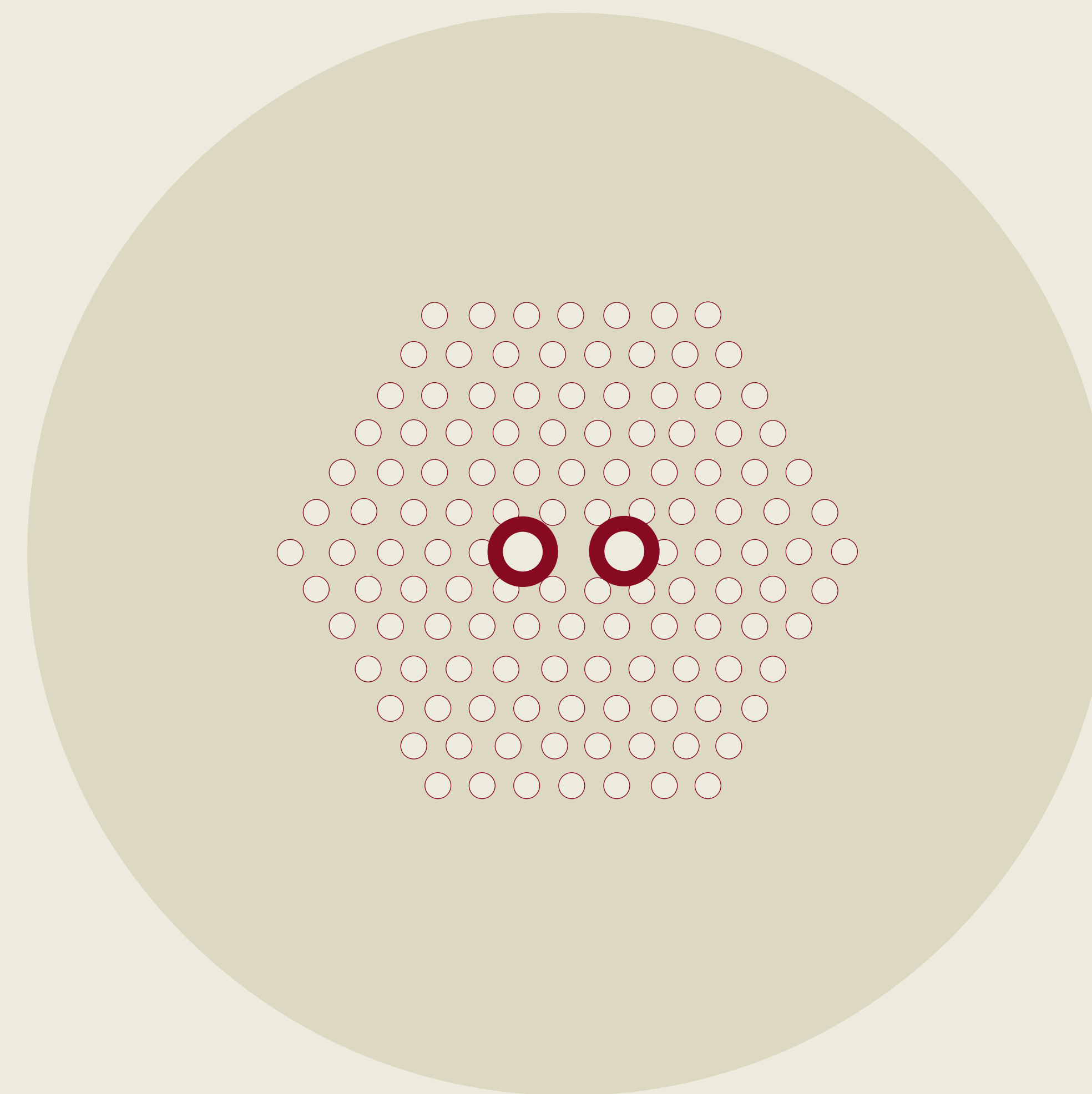
Low-loss fiber from 600 to 1700 nm

Polarization-maintaining

Single-mode at all wavelengths

Radiation hard pure silica fiber

Wavelength independent mode-field diameter



Non-linear fibers

Applications

Sensors

Gyroscopes

Interferrometers

Specifications

Optical

Single-mode	Yes
Attenuation [dB/km]	≤ 3
Mode-field diameter, $1/e^2$ [μm]	$5.5 / 3.8 \pm 0.8$
Mode-field ellipticity	≈ 1.5
Birefringence	$\geq 4 \cdot 10^{-4}$
PER, typical [dB]	> 18
Chromatic dispersion [ps/nm/km]	55 ± 10

Mechanical

Core diameter [μm]	6.3/4.4
Outer cladding diameter, OD [μm]	125 ± 5
Coating diameter [μm]	240 ± 10
Core and cladding material	Pure silica
Coating material, single-layer	Acrylate
Coating concentricity [μm]	< 10
Proof test level [%]	0.5

Non-linear fibers

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



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