

SC-250_14-PM-Ge

Single-mode PM fiber

Large area, single-mode fiber

The SC-250/14-PM-Ge is a truly single-mode, all-solid-core step-index single-clad fiber.

Based on a unique refractive index control, the 14 μm polarization-maintaining core delivers diffraction-limited output in a single mode. The mode quality is stable over time and independent of coiling.

The fiber offers mode-matching with our DC-135/14-PM-Yb fiber and is spliceable to commercially available pump/signal combiners.

Features

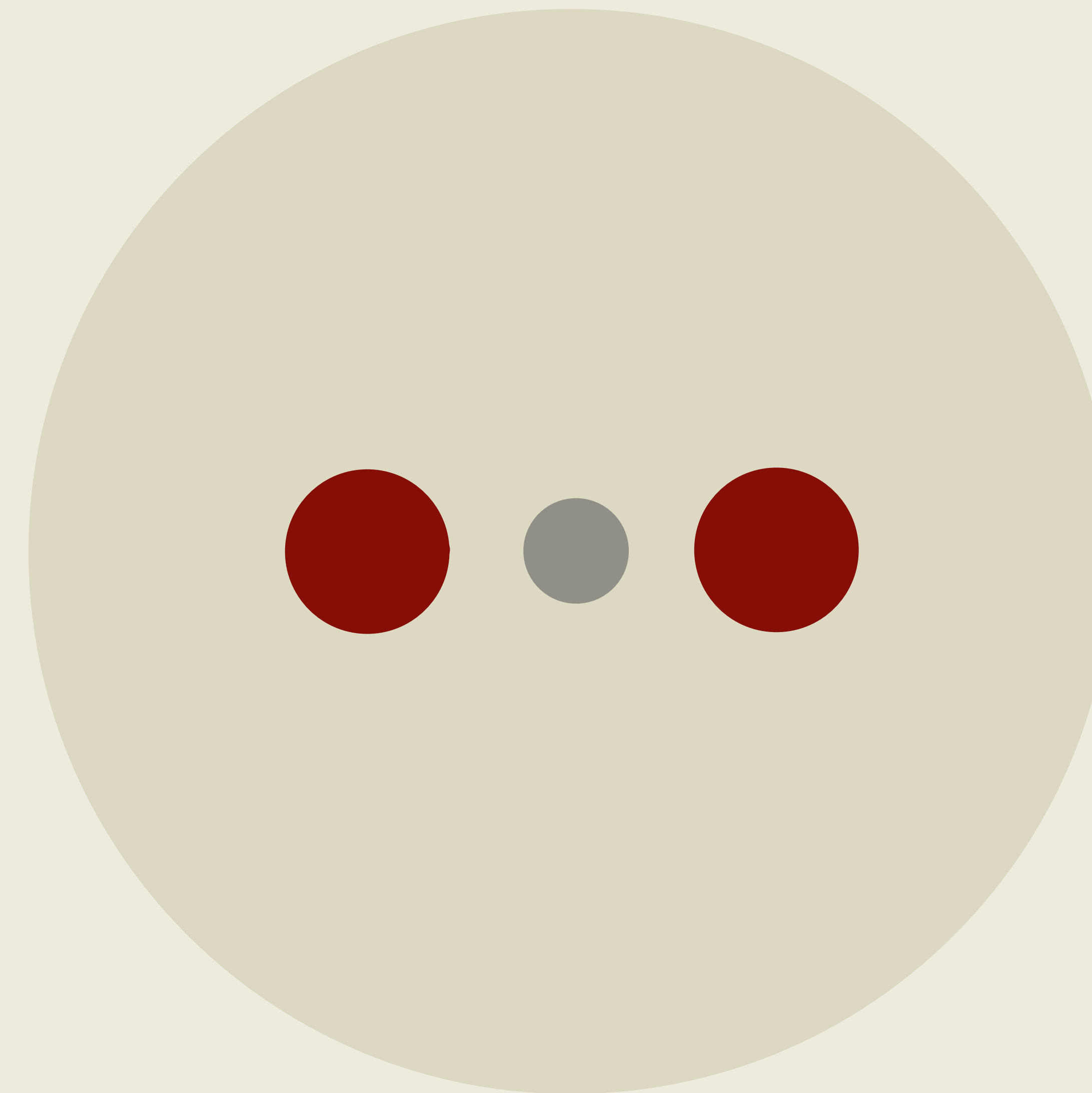
Truly single-mode

Large 15 μm mode diameter

Solid step-index

Polarization maintaining

Mode-matching with our single-mode gain fiber: DC-135/14-PM-Yb



SC-250_14-PM-Ge

The single-mode advantages

Our single-mode fibers offer several advantages compared to standard multi-mode large area fibers:

Excellent output stability

Outstanding beam quality

No need for tight coiling

No coiling-induced mode area compression

Specifications

Signal core

Mode properties	Single-mode
Cut-off [nm]	≤ 1000
Beam quality (typical) @ 1064 nm	$M^2 < 1.2$
Mode-field diameter, 1/e ² @ 1064 nm [μm]	15 ± 1

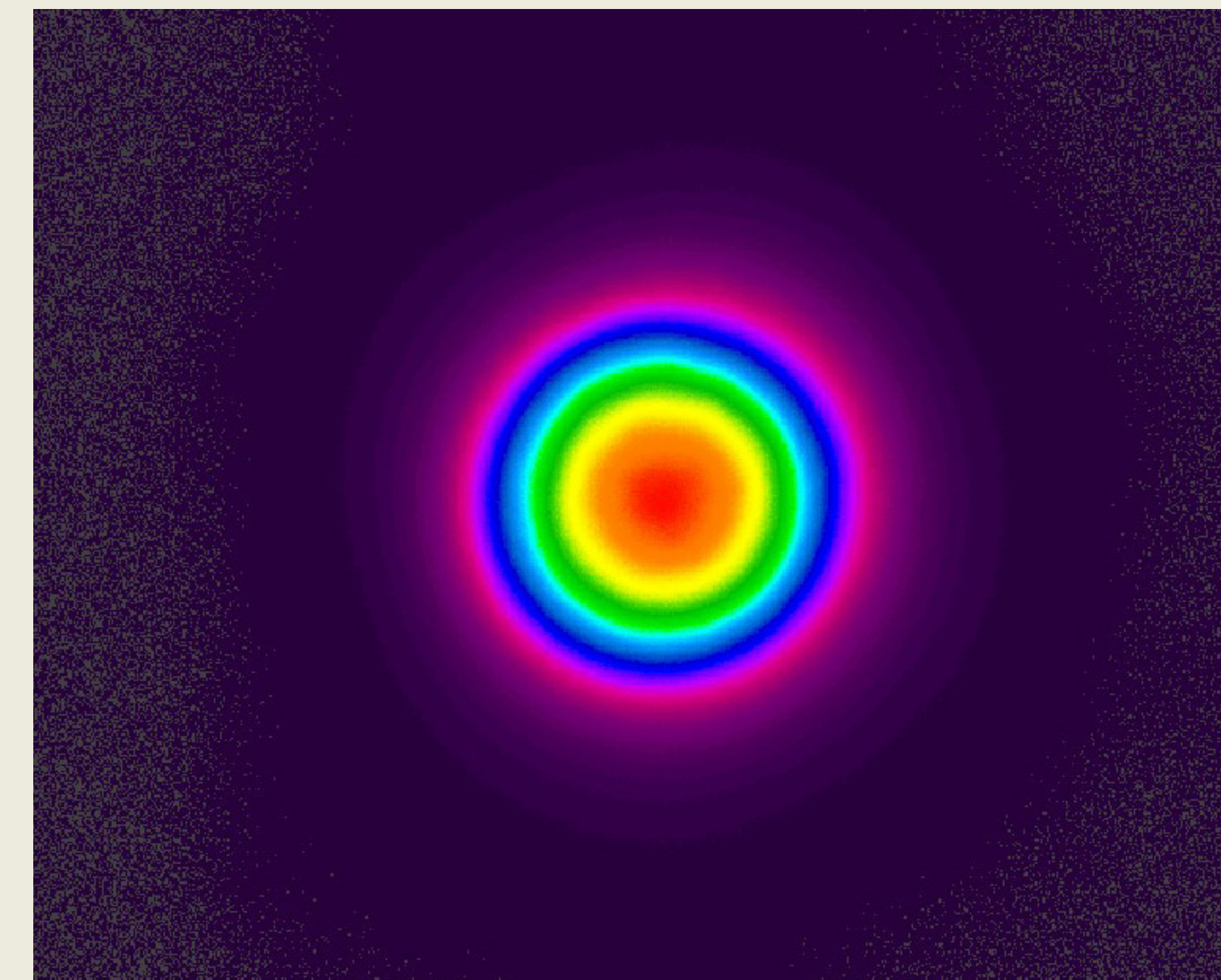
Polarization parameters

Birefringence Δn @ 1100 nm, typical	$\geq 1 \times 10^{-4}$
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Physical properties

Signal core diameter [μm]	≈ 14
Outer cladding diameter [μm]	249 ± 3
Coating diameter [μm]	350 ± 15
Coating material, single-layer	High-temperature acrylate
Minimum bending diameter [cm]	18

Typical near field intensity profile



SC-250_14-PM-Ge

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



¹ Spotsize varies with wavelength.

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