

NL-PM-750

Nonlinear photonic crystal fiber for supercontinuum generation

- Small mode field area
- High nonlinear coefficient
- Zero dispersion in visible wavelength range

This single mode nonlinear photonic crystal fiber combines a very small effective mode field area ($2 \mu\text{m}^2$) and zero dispersion around 750 nm to allow efficient supercontinuum generation with 800 nm pump sources. Furthermore the fiber is polarization maintaining for increased efficiency, making it ideal for applications like frequency comb generation.

For easy supercontinuum generation using 800nm range femtosecond lasers, see also the [femtoWHITE modules](#).

Specifications

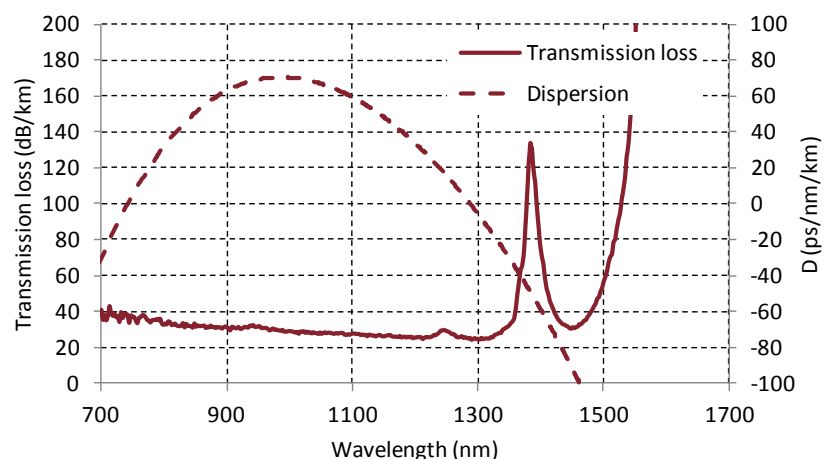
Optical

Short zero dispersion wavelength	750 ± 15 nm
Long zero dispersion wavelength	1270 ± 30 nm
Mode field diameter @ 780 nm	1.6 ± 0.3 μm
Numerical aperture @ 780 nm	0.38 ± 0.05
HOM cut-off wavelength	< 650 nm
Birefringence @ 780 nm	> 3·10 ⁻⁴
Attenuation @ 780 nm	< 0.05 dB/m

Physical

Material	Pure silica
Cladding diameter	120 ± 5 μm
Coating diameter	240 ± 10 μm
Coating material	Single layer acrylate

Typical measured dispersion and attenuation



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

Applications

- Supercontinuum generation



NKT Photonics A/S (Headquarters)
Blokken 84, 3460 Birkerød, Denmark
Phone: +45 4348 3900
Fax: +45 4348 3901

NKT Photonics GmbH
Schanzenstrasse 39, Bldg D9-D13
51063 Cologne, Germany
Phone: +49 221 99511-0
Fax: +49 221 99511-650

NKT Photonics Inc.
1400 Campus Drive West
Morganville NJ 07751, USA
Phone: +1 732 972 9937
Fax: +1 732 414 4094