

These fibres offer both low dispersion at the pump wavelength and high numerical aperture and are therefore particularly suited for the efficient generation of supercontinuum with ti-sapphire and YAG pulsed pump sources.

### Main characteristics

- Pure silica core, low background losses
- Small effective area, high nonlinear coefficient
- Dispersion optimised for pumping near 780 nm & 1060 nm

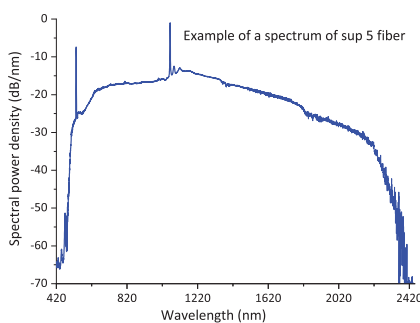
### Applications

- Supercontinuum generation
- Frequency comb generation

### Fibre specifications

Fibre type	SUP-2-135	SUP-5-125	SUP-5-125-PM
<b>Optical parameters</b>			
Zero dispersion wavelength (ZDW) (nm)	760 +/- 15	1050 +/- 5	1050 +/- 5
Mode field diameter @ ZDW (µm)	1.6 +/- 0.2	4.6 +/- 0.3	4.5 +/- 0.3
Effective area @ ZDW (µm <sup>2</sup> )	1.9 +/- 0.2	14 +/- 2	16 +/- 2
Nonlinear coefficient (W.km <sup>-1</sup> )	105 +/- 10	10 +/- 1	10 +/- 1
Numerical aperture	0.4 +/- 0.05	0.2 +/- 0.02	0.2 +/- 0.02
Background loss @ ZDW (dB/km)	< 90	< 20	< 20
Background loss @ 1550 nm (dB/km)	N/A	< 15	<30
Birefringence (x 10 <sup>-4</sup> )	1 +/- 0.5	N/A	2.3 +/- 0.5
<b>Physical/Material parameters</b>			
Material	F300 Silica		
Core diameter (µm)	1.7 +/- 0.2	5 +/- 0.3	5 +/- 0.3
Cladding diameter (µm)	135 +/- 5	125 +/- 2	125 +/- 3
Coating outside diameter (µm)	240 +/- 10	245 +/- 10	240 +/- 10
Coating type	Dual coat high index coating acrylate		

### Typical supercontinuum generated in SUP-5-125 with 300 mW 1064 nm pulse laser (1.2 ns @ 25 kHz)



### Typical measured attenuation and dispersion

