

Nonlinear Photonic Crystal Fibers for 800 nm Pumping

DESCRIPTION

Photonic crystal fibers use a microstructured cladding region with air holes to guide light in a pure silica core, giving rise to novel functionalities. These nonlinear photonic crystal fibers combine a very small effective mode field area and zero dispersion to allow efficient supercontinuum generation with 800 nm pump sources. Some fibers are polarization maintaining for increased efficiency. All of these fibers are available with hermetically sealed ends and FC/PC connectors. For some of the fibers splicing to standard single mode fiber or large mode area PCF is also an option.

FIBER PROPERTIES

Item Name	S	Core Diameter [μm]	Cladding Diameter [μm]	Estimated Zero Dispersion Wavelength [nm]		Attenuation @ 780 nm [dB/km]	SM Cut-off Wavelength [nm]	Mode Field Diameter [μm]	NA @ 780 nm [%]	γ @ 780 nm [Wkm ⁻¹]
				Short	Long					
NL-1.5-590		1.5	90	590*	1310*	< 45	815	1.34	0.45	136
NL-1.7-685		1.7	105	685*	1520	< 35	1025	1.49	0.40	110
NL-PM-750	S	1.8	115	750	1250	< 60	690	1.55	0.39	102
NL-1.9-765	S	1.9	110	765*	1705*	< 40	1265	1.60	0.38	96
NL-2.0-810	S	2.0	120	810*	1920*	< 35	1340	1.68	0.36	87

S: Available with Splicing to standard fiber

*: Very rough estimates

TIP

Please also check our FemtoWhite devices – fully assembled supercontinuum devices. Supercontinuum appl. note available.