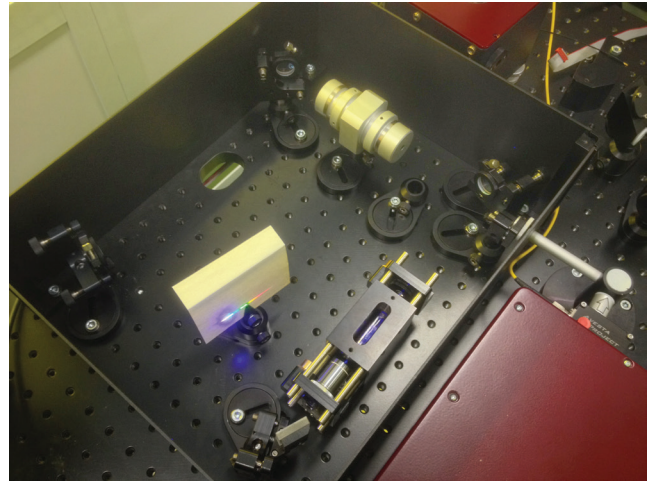




GECON. Supercontinuum Generator

- Includes a broadband Faraday isolator
- Built on a solid breadboard to ensure better stability
- Modular design, suitable for installation of a custom PCF
- Dustproof design of the fiber launch pads
- Slit-assisted prism-based wavelength selector (optional)
- Flexible input beam height setting (105...140 mm)
- Compatible with THORLABS M9x0.5 aspheric lens mounts and standard RMS-threaded microscope objectives



Product overview

The GECON supercontinuum generator is an extension device for an ultrafast Ti:Sapphire oscillator, providing a complete solution for transformation of near-800 nm (GECON-800) into wideband light that covers the whole optical spectrum.

In the GECON-800 model, the parameters of the supercontinuum spectrum (span & shape) are highly dependent on the input Ti:Sapphire pumping radiation. By tuning the center wavelength and power of the pump it is possible to shape the spectrum of the supercontinuum, e.g. to emphasize a given region in the power density distribution. This key feature, combined with a flip-mirror enabled, prism-based wavelength selector, gives you an opportunity to fully harness the whole visible spectrum, employing spectral slabs of almost arbitrary position and width in numerous applications. The GECON is based on highly nonlinear photonic crystal fibers with various zero dispersion wavelengths available. With the GECON-800, it is possible to reach both normal & anomalous dispersion regimes of operation with a standard tunable Ti:Sapphire oscillator, thus acquiring two different types of spectra.

The design of the device allows the fiber itself to be changed by the user, making it even more flexible while reliable enough for the majority of research tasks thanks to specially designed dustproof launch- and collimation pads.

GECON technical specifications

	GECON-800
Spectrum (at level -20 dB)*	500-950 nm (GECON-800(a)) 380-1050 nm (GECON-800(b))
Conversion efficiency (not including Faraday isolator losses)	60%
Pump wavelength	~800 nm
Max. pump peak power (average power)	125 kW (500 mW at 50 fs, 80 MHz)
Input beam height**	120 mm
Output beam height***	120 / (126...128) mm
Dimensions (LxWxH)	500x250x170 mm

* - exact spectrum shape and width depends on pump laser specs, two basic configurations are given for 800 nm pump as an example, see spectrum plots for more details;
 ** - other values upon request;
 *** - direct output / (wavelength selector output).



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