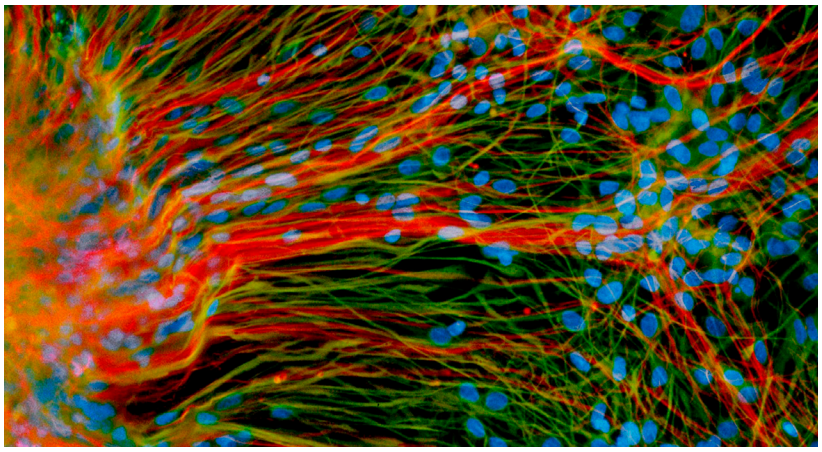
NEW PRODUCT DATASHEET

WhiteLase SC450-PP-HE
High-Energy Supercontinuum

ULTRA BROADBAND
WHITE-LIGHT SOURCE



KEY FEATURES

- Micro-Joule pulse energy
- Spectrum from <**550nm** to >**1750nm**
- >**1nJ/nm** from <**600nm** to >**800nm**
- Touchscreen interface controls
- MHz variable repetition rate
- Picosecond pulse widths
- Maintenance-free and air-cooled

The **WhiteLase™ SC450-PP-HE** systems are desgined for high energy applications by providing very high spectral energy density across a wide spectral bandwidth. Producing micro-joule class supercontinuum pulses enables new application areas for supercontinuum sources and has proven perfomance in laboratories around the world. By incorporating a pulse picker the system offers the option of different repetition rates, which allows optimal performance for many applications in both research and industry.

The lasers are easy to use and offer simple and safe operation with a touchscreen interface. The inherent robust all-fiber design allows for unprecedented levels of reliability.

The laser can be used in conjunction with Fianium **AOTF** and **SuperChrome™** Filters, giving a variety of tuning options.

STANDARD SPECIFICATIONS

	WhiteLase High-Energy Supercontinuum
Model	**WL-SC450-PP-HE**
Minimum Wavelength	<550nm
Maximum Wavelength	>1750nm
Total Output Power	>2W at 1MHz
Spectral Power Density (600nm to 800nm)	>1nJ/nm
Repetition Rate (user-selectable)	0.5MHz & 1MHz
Oscillator Type	Picosecond mode-locked oscillator
Power Stability	<3%
Spatial Mode	Single mode at all wavelengths
Output Optic	φ16 x 50mm Collimator
Output Polarisation	Unpolarised
Beam Diameter	≈1.5mm @ 530nm ≈2mm @ 633nm ≈3mm @ 1100nm
Armoured Fibre length	1.5m
User interface	1. Integrated touchscreen graphical user interface 2. PC via USB interface
Trigger output	1. NIM Compatible trigger with adjustable delay (SMA) 2. Oscillator monitor potodiode (SMA)
Cooling	Integrated air-cooling
Power consumption (max)	<250W
Dimensions (mm)	450 x 390 x 180 (19'' benchtop chassis, 4U height)
Weight	<20kg

CUSTOM OPTIONS

- High power version up to **2MHz**
- Divergent output optic
- Cut-off wavelength up to **2000nm**
- Cut-in wavelength down to **450nm**
- Visible or IR optimisation

APPLICATIONS

- Fluorescence excitation
- Micro machining and material processing
- Super-resolution techniques
- Time resolved and lifetime studies
- Raman spectroscopy
- Optical Coherence Tomography (OCT)

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