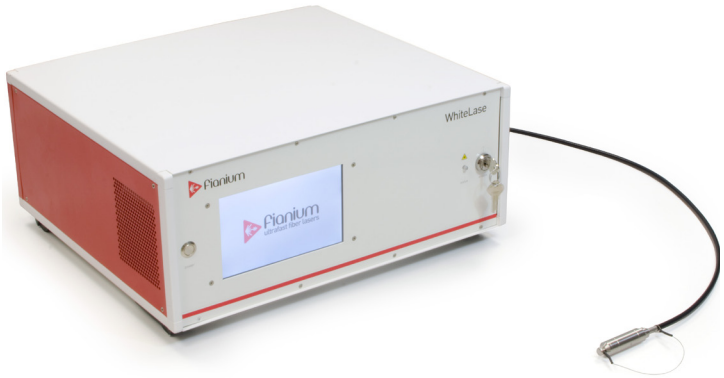
NEW PRODUCT DATASHEET

WhiteLase SC Series High-Power Supercontinuum

ULTRA BROADBAND
WHITE-LIGHT LASER



KEY FEATURES

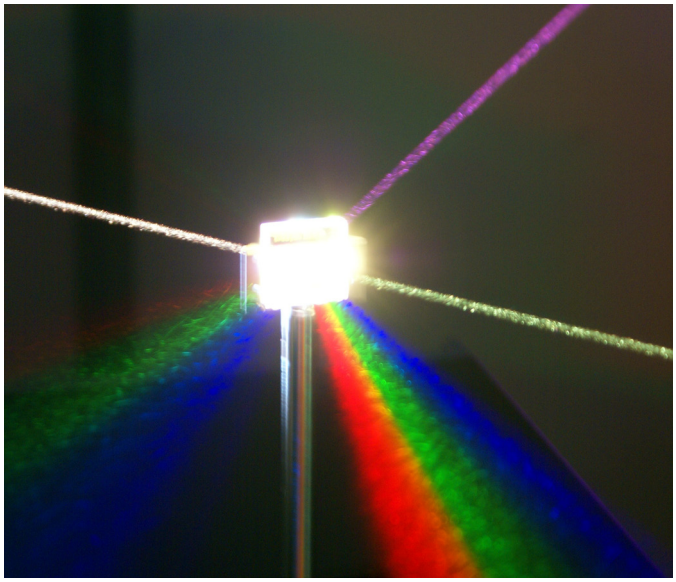
- Spectrum from **400nm** to **2400nm**
- Fixed or variable repetition rate
- Highest available output power to >**10W**
- Ultimate visible brightness (400-750nm)
- Touchscreen control with intuitive operation
- Single spatial mode across the output spectrum
- Advanced triggering options
- Modular and upgradable design
- High reliability and low cost of ownership
- Wide range of Plug-and-Play filter options

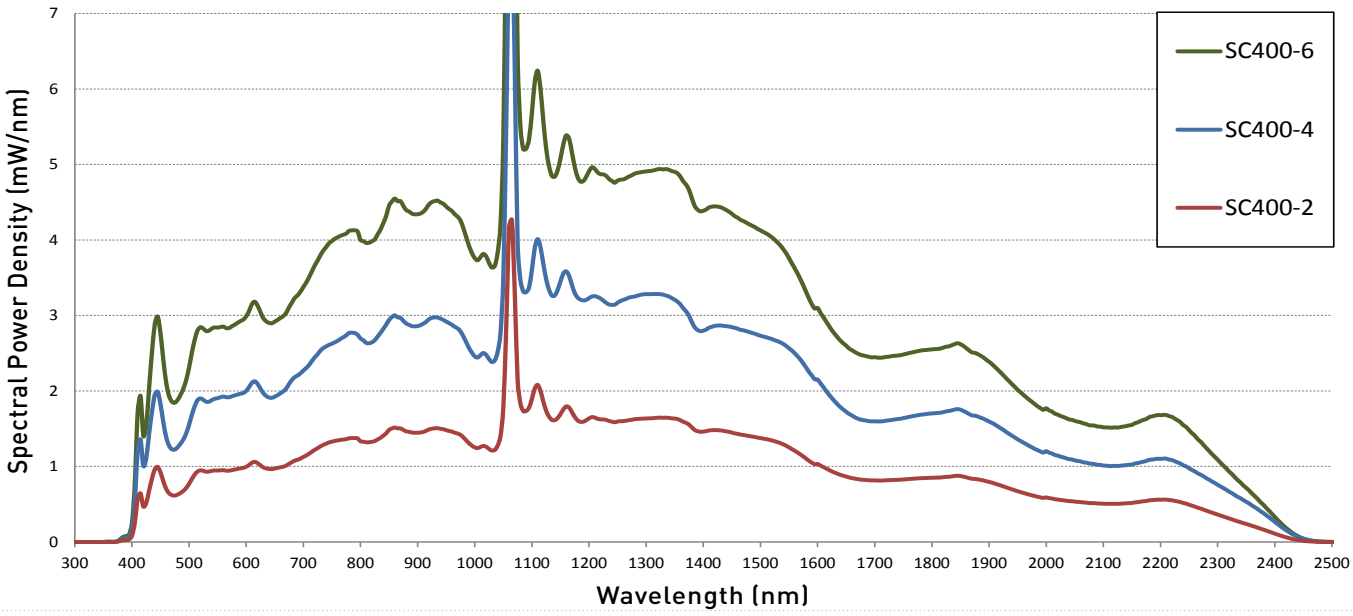
The **WhiteLase™ SC400, SC450** & **SC480** systems are high-power fiber lasers generating ultrafast broadband supercontinuum light. Operating in the MHz repetition rate range, with picosecond pulses, these systems can be utilised effectively for both steady-state and lifetime measurement. The inherently robust all-fiber design provides unsurpassed performance combined with high reliability and ease-of use. The touchscreen interface enables one-touch access to all laser settings, pre-sets, diagnostics and live system status.

WhiteLase™ SC400; Blue-enhanced system providing a short cut-in wavelength with high brightness from approximately 400nm.

WhiteLase™ SC450; Versatile supercontinuum laser with a spectral range from 450nm for visible and near-infrared applications

WhiteLase™ SC480; IR-Optimised system with the highest spectral power density from 480nm to beyond 2400nm. Now available with up to 10W power.





* Patent Pending

STANDARD SPECIFICATIONS

	WhiteLase High Power Supercontinuum				
Model	**NEW: WL-SC-480-10**	**WL-SC450-8 WL-SC480-8**	**WL-SC400-6 WL-SC450-6 WL-SC480-6**	**WL-SC400-4 WL-SC450-4 WL-SC480-4**	**WL-SC400-2 WL-SC450-2 WL-SC480-2**
Minimum Wavelength	<480nm	SC450: <450nm SC480: <480nm	SC400: <410nm SC450: <450nm SC480: <480nm		
Maximum Wavelength	≈2400nm				
Total Power (full spectrum)	>10W	>8W	>6W	>4W	>2W
Visible Power (400-750nm)	>1500mW	>1200mW	>900mW	>600mW	>300mW
Extended Vis Power (400-850nm)	≈2200mW	≈1800mW	≈1300mW	≈900mW	≈450mW
Average Spectral Power Density	>5mW/nm	>4mW/nm	>3mW/nm	>2mW/nm	>1mW/nm
Fundamental Repetition Rate	100MHz	80MHz	60MHz	40MHz	20MHz
Adjustable Repetition Rate Range (with optional pulse picker)	N/A	100kHz - 80MHz	100kHz - 60MHz	100kHz - 40MHz	100kHz - 20MHz
Power Stability	<1%				
Fundamental Pulsewidth	≈6ps				
Output Optic	1" Divergent Optic	ϕ16 x 50mm Collimator			
Beam Diameter	≈1.5mm @ 530nm ≈2mm @ 633nm ≈3mm @ 1100nm				
Armoured Fiber length	1.5m				
State of polarisation	Unpolarised				
User Interface	1. Integrated touchscreen graphical user interface 2. PC via USB interface				
Sync (trigger) Outputs	1. NIM Compatible trigger with adjustable delay 2. Oscillator monitor photodiode				
NIM Trigger Specifications	>10ns adjustable delay in 10ps steps <10ps timing jitter				
Cooling	Integrated air cooling				
Power Requirements	100-240V, 50/60Hz				
Dimensions (mm)	450 x 390 x 180 (19" benchtop chassis, 4U height)				
Weight	<20kg				

CUSTOM OPTIONS

- Custom repetition rates **20-120MHz**
- Total output power up to **12W**
- Divergent output optic
- Cut-off wavelength up to **2500nm**
- Visible power **>2500mW**
- **19"** rackmount chassis kit
- **TTL** or **optical** trigger output
- **Dual** or **triple** output ALP system

APPLICATIONS

- Fluorescence excitation
- Broadband spectroscopy
- Fluorescence lifetime measurement
- Optical Coherence Tomography (OCT)
- Nanophotonics
- Flow cytometry
- Hyper-spectral Imaging
- Industrial inspection
- Time Correlated Single Photon Counting (TCSPC)

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