

CARS Laser Series

Dual Output Supercontinuum White Light Source

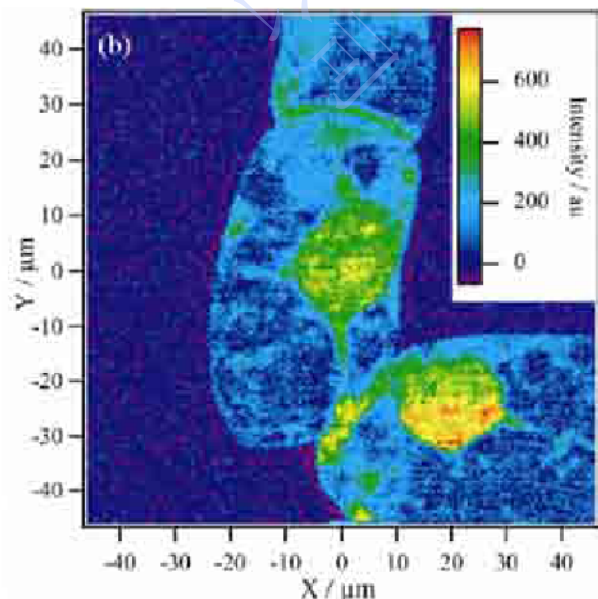
The CARS Laser series is a supercontinuum source dedicated to imaging and spectroscopy applications. This solution combines the high performances of a subnanosecond narrow linewidth laser with the broadband emission of an all-fibered supercontinuum, ensuring a reliable, compact and cost-effective alternative to conventional equipments. The feasibility of high resolution and multicolour CARS imaging has already been demonstrated with this dual output laser.

FEATURES

- Pump/Stokes dual output
- Maintenance-free
- User-friendly
- Excellent spectral resolution $< 0.1 \text{ cm}^{-1}$
- Pump output 1064 nm
- Pump output $> 70 \text{ mW}$
- Stokes output broadband spectrum
- Stokes output $> 70 \text{ mW}$
- Subnanosecond pulses
- SHG output at 532 nm available
- Singlemode TEM00

APPLICATIONS

- CARS (Coherent Anti-Stokes Raman Scattering)
- Imaging
- Spectroscopy



Tobacco cells imaging
Credits: *Optics Letters*, Vol. 33, Issue 9, pp. 923-925 (2008)

CARS Laser Series

Dual Output Supercontinuum White Light Source

CARS-SM-30

Optical specifications

Pump signal	
Central wavelength	1064 nm
Total average power *	> 70 mW
Output connection	Free-space
Supercontinuum broadband spectrum	
Spectral bandwidth	min < 420 nm Max > 2400 nm
Total average power *	> 70 mW
Output connection	FC/APC (~ 1 meter armored cable)
Seed repetition rate **	~ 30 kHz
Seed pulse width	< 1 ns
Power stability ***	+/- 1.5 %
Spatial mode	Singlemode TEM00
Options	1, 2

Other specifications

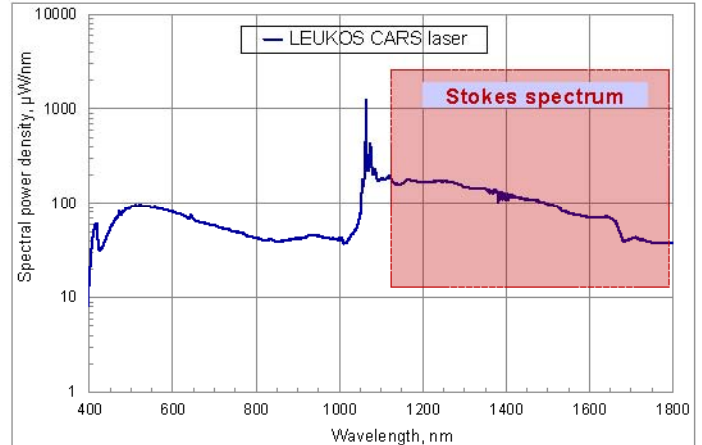
Control interface	Front panel display, RS232 control
Dimensions (mm) (LxWxH) ****	305x250x145
Weight	< 7 kg
Power requirements	100-240V, 50/60Hz

* Higher output power available on request.

** Other repetition rate higher than 30 MHz available on request.

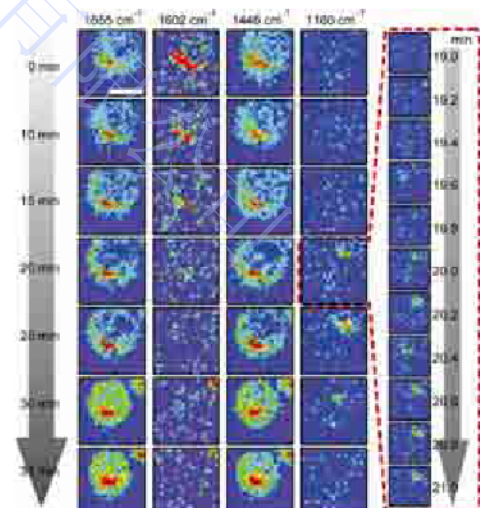
*** Typical value of long-term stability for total average power.

**** Custom OEM packaging available upon request.



OPTIONS

- 1 Supercontinuum collimated output
Broadband collimator
- 2 SHG output
Free space 532 nm output



Budding yeast cell multicolour and time-resolved imaging
Credits: Angewandte Chemie International Edition, vol. 49,
no. 38, pp. 6773-6777, 2010



**INVISIBLE AND VISIBLE LASER RADIATION
AVOID EXPOSURE to BEAM
Class 3b (IIB) Laser product**

200 nm < λ < 3000 nm; Pulse width ≤ 1 ns; AVG Power ≤ 200 mW
This laser does not comply with 21 CFR 1040.10 nor IEC 60825.1-2001.
Use only as an OEM component.

All specifications are subject to change without notice.
LEUKOS CARS-Series does not comply with CDRH requirements.
The customer is responsible for CDRH certification of the systems
incorporating the LEUKOS laser.