

Mid-IR broadband fiber laser

Coverage is a turn-key supercontinuum source emitting a continuous spectrum from 1.9 μm up to 4.0 μm . The very high brightness associated to the high average power allows a wide range of applications such as spectroscopy, spectro microscopy or optronic counter-measures.

Based on a patented seed source, the all-fiber integrated laser delivers up to 0.5 mW/nm over the operation wavelength range.

In 2016, the laser has been used for a world first demonstration of a tabletop spectro-microscopy imaging of lipidic vesicles in liver sample.



Key Points



- Ideal for microscopy experiments
- Fully incoherent spectrum



- Highest imaging resolution accessible
- High brightness beam



- Drastic reduction of acquisition time
- Application proven power & spectrum stability



- Rock solid, alignment free
- All fiber supercontinuum source



- Suitable for time resolved experiments
- High repetition rate (> 2 MHz)



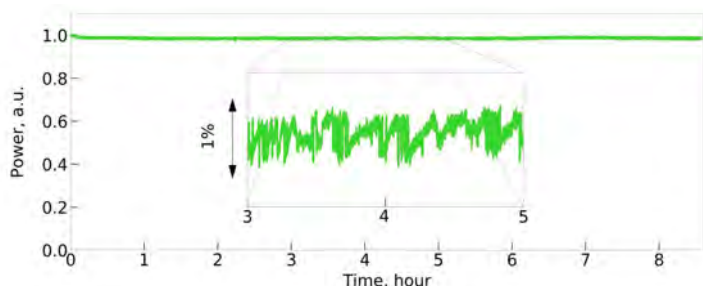
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Optical specifications

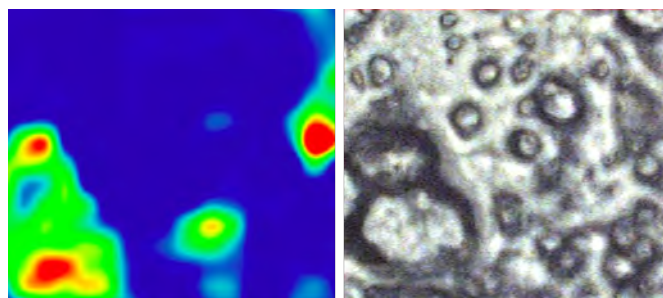
Operating wavelength	From 1.9 μm up to 4.0 μm (2500 cm^{-1} to 5260 cm^{-1})
Output power	> 0.9 W
Spectral power density	Up to 0.5 mW/nm
Repetition rate	2.4 MHz typical
Total power stability (RMS over 8 hours)	< 1%
Laser output	Collimated
Beam shape	Gaussian, single mode

Mechanical/Electrical specifications

Operation voltage	100 – 240 V VAC 50/60 Hz
System cooling	Active air cooling
Operating temperature	+20 °C to +30 °C
Dimensions (HxWxD) per unit	177x483x466 mm3 (x2 units)
Weight	20 kg (electrical unit) / 20 kg (optical unit)



Typical long term stability of a COVERAGE laser



High resolution ($3 \times 3 \mu\text{m}^2$) FTIR Micro-spectroscopy
 Borondics et al. OPTICA 5-4, April 2018

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INVISIBLE LASER RADIATION
 AVOID EXPOSURE TO BEAM
 Class 4 (IV) Laser product

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