

Ideas taking shape – worldwide.



Patent pending.

The Tunable Laser Light Source C-WAVE basic

Features

The C-WAVE concept opens the door to the generation of laser-based light across a wide spectral range, going beyond the coverage of diode, dye or Ti:Sa lasers. If wide spectral coverage and easy wavelength selection are your primary needs, C-WAVE *basic* may be your source of choice. Simply set the required wavelength via the GUI or programmable interface.

Depending on the required output power level, C-WAVE *basic* is either pumped by an external single-frequency laser or comes with an integrated laser, making operation and application even easier for you.

You need some special wavelengths for a particular application? Please inquire!

Possible Applications

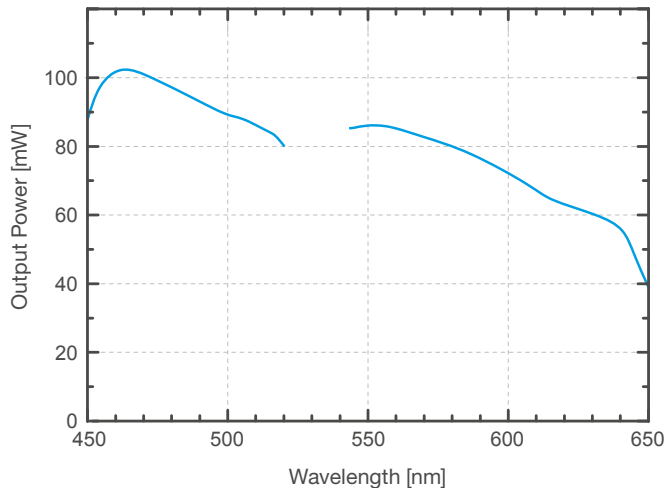
- Microscopy
- Biophotonics
- Spectroscopy of solids or liquids
- Characterization of optical components

Specifications

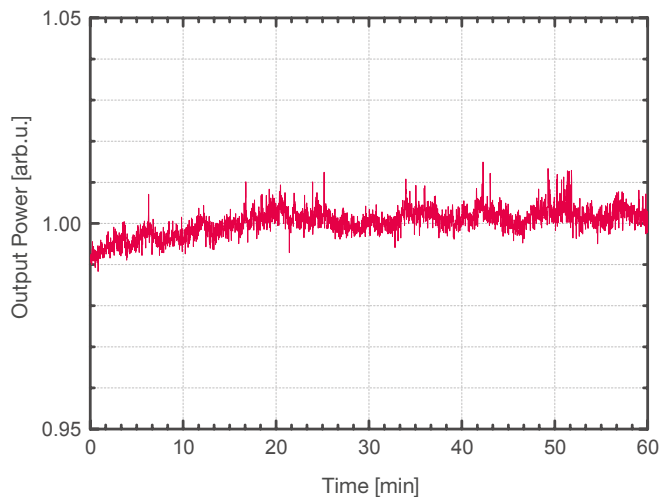
	visible	IR
Wavelength range	450 – 522 nm ^{a)} 542 – 650 nm ^{a)}	900 – 1044 nm ^{a)} 1084 – 1300 nm ^{a)}
Wavelength selection	computer controlled	
Power		
· with 1.5 W pump laser	> 30 mW	> 200 mW
· with 5 W pump laser	> 100 mW	> 500 mW
Amplitude noise	± 5 %	± 2 %
Beam profile	TEM ₀₀ , M ² < 1.2	
Beam diameter	1.2 mm ^{b)}	
Divergence (full angle)	< 1 mrad ^{b)}	
Beam polarization	linear, horizontal, > 100:1	
Wavelength accuracy	1 nm	2 nm

^{a)} Range depending on the selected wavelength modules;
other wavelengths upon request.

^{b)} Typical values.



Typical output power over the visible wavelength range with 1.5 W pump laser.



Power stability of C-WAVE: Output power over time measured at 571 nm.

Technical Data

Computer interface	LAN
Power supply	110 V / 230 V
Power consumption	100 W
Cooling	Closed-loop chiller ^{a)}

^{a)} Please contact us for compatible chillers.

Pump Laser Options

- Integrated pump laser (1.5 W)^{b)}
- External pump laser (5 W)^{b)}

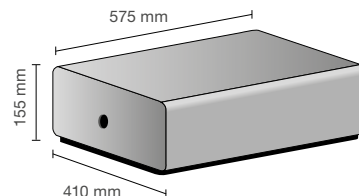
^{b)} Please contact us for compatible pump lasers.

Requirements

Operating temperature range	20–25 °C, constant
Max. relative humidity	10–85 %, non condensing
Mounting surface	vibration-isolated optical table
Air	free of dust

Dimensions

Length	575 mm
Width	410 mm
Height	155 mm
Weight	34 kg



Designed according to UL standards.

Extended warranty available.

Patent pending.



In cooperation with:



Fraunhofer
IPM