

Single Frequency DPSS Laser



The LASOS® DPSS laser series is the best choice when reliability and long lifetime matters.

The special optical design and an intelligent power and temperature control guarantee:

- Excellent long-term stability
- Low noise
- Exceptional good beam quality
- Long lifetime.

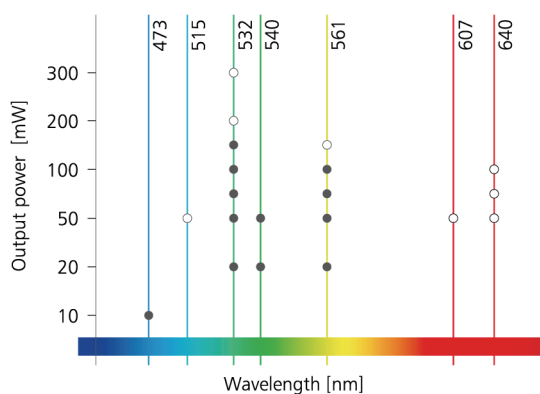
These characteristics are ideal for a variety of applications as in DNA sequencing, flow cytometry, digital imaging, analytical chemistry, fast flow rate particle measurements or confocal microscopy. Since all laser models emit only a single longitudinal mode they are also an ideal choice for application in RAMAN spectroscopy. Housed in compact and robust packages,

these lasers are the perfect choice for design in and integration into OEM instrumentation and systems and also for end user applications in research and development. The lasers will be provided as self-contained laser modules, as OEM-component modules or as fully integratable subsystems with a compact controller as OEM or stand alone version with computer interfacing. Customized solutions for specific applications are possible. All laser models can be provided with a polarization maintaining, adjustment free fiber coupling.

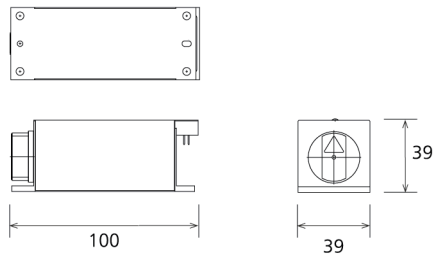
	BLK	GLK	YLK	RLK				
Wavelength [nm]	473.1±0.3	515.0±1	532.3±0.3	540.0±1	561.3±0.3	607.1±0.5	639.6±0.5	
Output power [mW]	5	50	20	20	50	50	50	
	10		75		75		75	
			150		50		100	100
			300		150		150	150
Beam diameter [mm]	0.7/0.32	0.7/0.32	0.7/0.32	0.7/0.32	0.7	0.7	0.7	
Beam divergence [mrad]	<1.1	<1.2	<1.2	<1.2	<1.3	<1.4	<1.4	
Beam Ellipticity	0.9...1.1	0.9...1.1	0.9...1.1	0.9...1.1	0.9...1.1	0.9...1.1	0.9...1.1	
Beam quality M ² (TEM ₀₀)	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	
Output power stability over 8 h [%]	<±1	<±1	<±1	<±1	<±1	<±1	<±1	
Wavelength stability during 8 h [nm]	<±0.002	<±0.002	<±0.002	<±0.002	<±0.002	<±0.002	<±0.002	
Pointing stability [μrad/K]	<6	<6	<6	<6	<6	<6	<6	
Line width [MHz]	<5	<5	<5	<5	<5	<5	<5	
Optical noise (30 Hz-10 MHz) [% rms]	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<2	
Polarization ratio (vertical)	>200:1	>200:1	>200:1	>200:1	>200:1	>200:1	>200:1	
Warm up time [min]	<10	<10	<10	<10	<10	<10	<10	

*Output power available for different wavelengths:

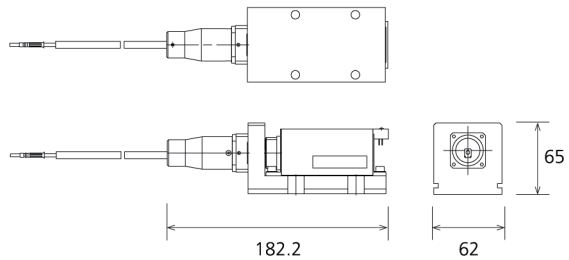
● Standard models ○ Ask for lead time



Dimensions laser head [mm]:



Dimensions laser head fiber coupled [mm]:



The laser head is available with shutter for stand alone application and without shutter as OEM version.

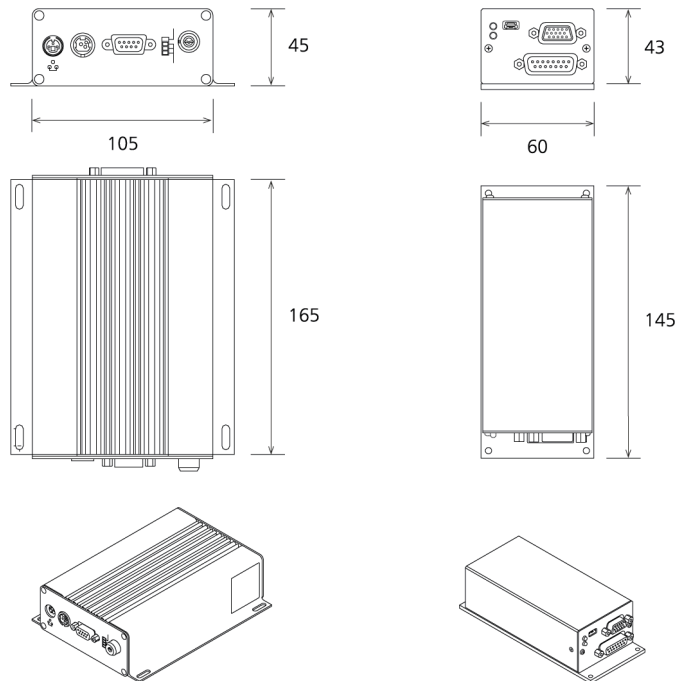
Option:

- Fiber coupling single mode, polarization maintaining or multi-mode
- Coupling efficiency > 70%
- For details refer to the LASOS Fiber series catalogue

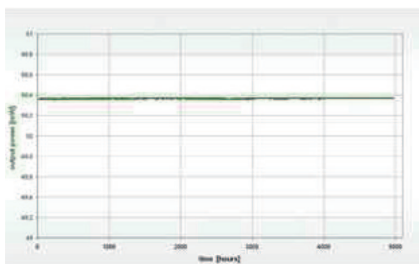
Controller

	CKL 2400	CKL 1000
Interface	RS232	USB 2.0
Options	CDRH and OEM versions Available as PCB in eurocard size	OEM versions
Operating voltage	12 or 24 V	12 or 24 V
Controller cable length	1 or 2 m	1 or 2 m
Operating current (at 24 V input voltage):		
Typical	< 0.6 A	< 0.6 A
Maximum	2 A	2 A

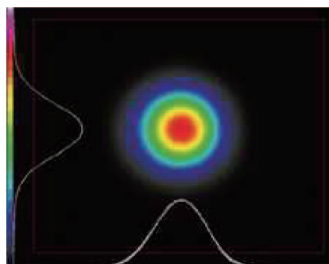
Dimensions [mm]



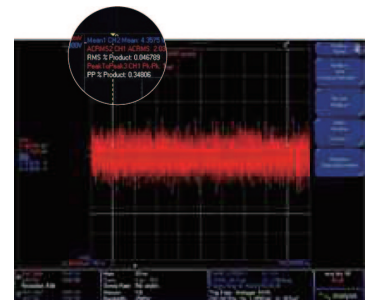
Features of the LASOS® DPSS laser series



Excellent long-term power and pointing stability



Exceptional good beam quality



Low noise