

LASOS® DPSS laser series







Single frequency diode-pumped solid state laser modules





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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 sequency, flow cytometry, digital imaging, analytical chemistry, fastflow-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 selfcontained 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.

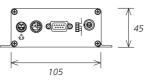
Model key	DLK	BLK	GLK		YLK		RLK
Wavelength [nm]	320	473	515 532	540 546	552 561	594 ¹⁾	607 640
Max. output power $[mW]^{2}$	20	100	50 300	50 50	50 150	20	50 200
Max. beam divergence [mrad]	1	1.1	1.2 1.2	1.2 1.2	1.3 1.3	1.3	1.4 1.4
Beam diameter [mm]				0.7 (0.32	on request)		
Beam ellipticity	0.81.	2		0.91.1			0.91.1
Beam quality M^2 (TEM ₀₀)				< 1.2			< 1.2
Power stability (8 h) [%]				<±1			<±1
Wavelength stability (8 h) [nm]				<±0.002			<±0.002
Pointing stability [µrad/K]				< 6			< 6
Line width [MHz] 3)				< 1			< 1
RMS noise (30 Hz-10 MHz) [%]	< 2			< 0.5			< 2
Polarization ratio (vertical)				> 200:1			> 200:1
Warm up time [min]				< 10			< 10

Controller

	CKL 2400 / 2405 / 2440	CKL 1000 / 1005	CKL 1000 / 1005 with stand alone kit			
Interface	RS232	USB 2.0	USB 2.0 and RS232			
Options	CDRH and OEM versions	OEM versions	CDRH compliant			
	Available as PCB in eurocard size		Switch Box, cable and power supply			
Operating voltage	12 or 24 VDC	12 or 24 VDC	12 or 24 VDC			
Controller cable length	1 or 2 m	1 or 2 m	1 or 2 m			
Operating current (at 24 V input voltage):						
Typical	< 0.6 A	< 0.6 A	< 0.6 A			
Maximum	2 A	2 A	2 A			

165

Dimensions [mm]:



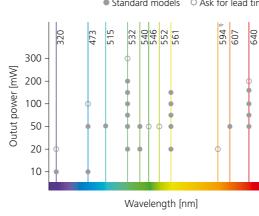


Model key Wavelength (last two digits) Output power (mW) TS (Example for GLK 532 nm with 50 mW output power: GLK 3250 TS)

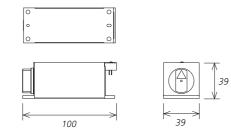
¹⁾ Longitudinal multimode operation

²⁾ Output power available for different wavelengths (see figure to the right)

³⁾ Allan Deviation for sample period < 0.5 s

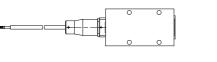


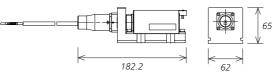
Dimensions laser head [mm]:



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

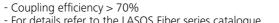
Dimensions laser head fiber coupled [mm]:





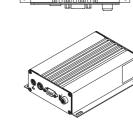
Option:

- Fiber coupling single mode, polarization maintaining
- or multi-mode



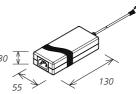
- For details refer to the LASOS Fiber series catalogue

• Standard models O Ask for lead time

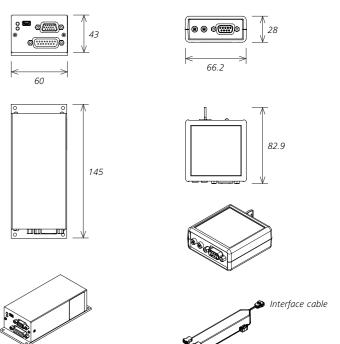


Optional accessory

Optional accessory		
	Power supply 24 V / 3 A	Heat sink LHA 2400
Operating voltage	100-240 VAC	24 VDC
Operating current	1.5 A	84 mA
Remark	Part of CKL 1000 / 1005 with stand alone kit	Recommended for all laser heads
	Optional accessory for CKL 2400 / 2405 / 2440	
Dimensions [mm]:	30 1 55 130	182.2 182.2 44.6 62 50 50







LASOS Sales Partner Locations

Please visit www.lasos.com for contact details

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