

LASOS

For worldwide photonics

LASOS[®] DPSS laser series



Single frequency diode-pumped
solid state laser modules





Single frequency diode-pumped solid-state laser modules

LASOS® DPSS laser series

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.

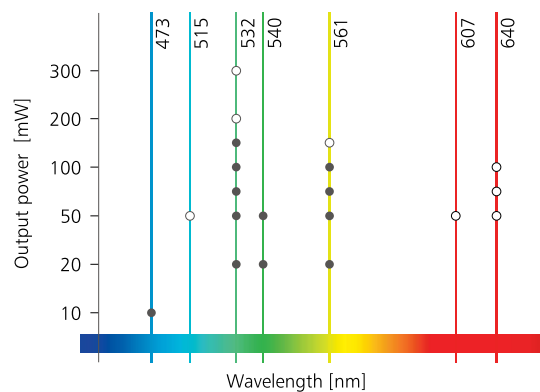
Customized solutions for specific applications are possible. All laser models can be provided with a polarization maintaining, adjustment free fiber coupling.

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

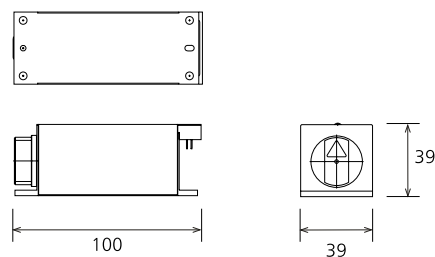
Model key for orders and enquiries: Model - Wavelength - Output power - Beam diameter - Controller - Cable length, or other options (example: GLK - 532.3 - 50 - 0.7 - 2)

*Output power available for different wavelengths:

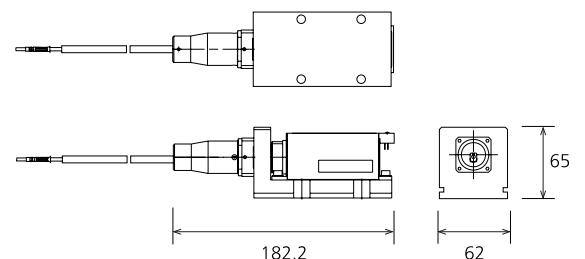
● Standard models ○ Ask for lead time



Dimensions laser head [mm]:



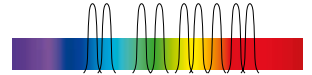
Dimensions laser head fiber coupled [mm]:



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

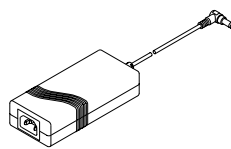
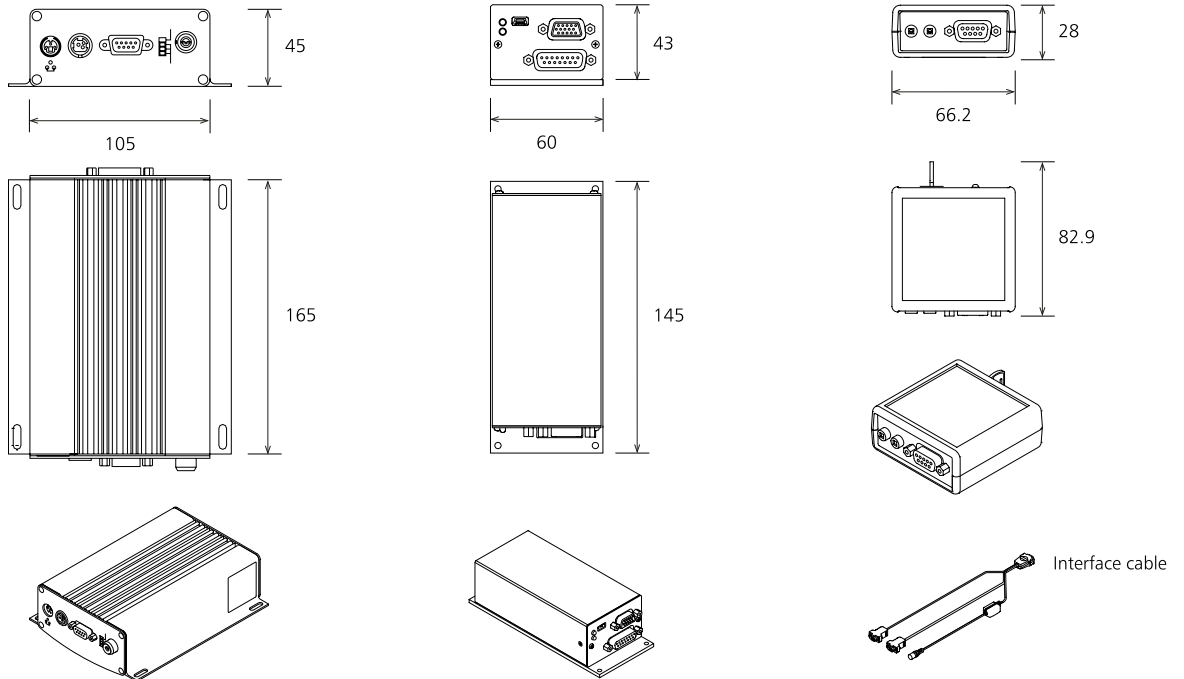
CKL 2400

CKL 1000

CKL 1000 with stand alone kit

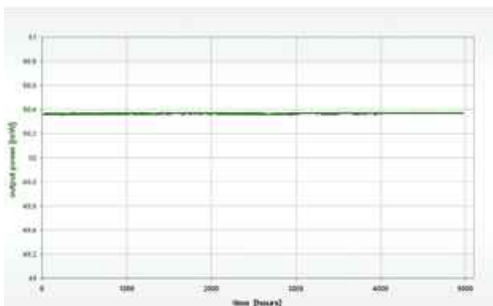
Interface	RS232	USB 2.0	USB 2.0 and RS232
Options	CDRH and OEM versions	OEM version	CDRH compliant
	Available as PCB in eurocard size		SwitchBox, cable and power supply
Operating voltage	12 or 24 V	12 or 24 V	24 V
Controller cable length	1 or 2 m	1 or 2 m	1 or 2 m
Operating current (at 24 V input voltage):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

Dimensions [mm]:

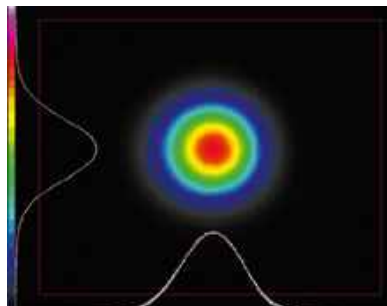


Power supply 24 V:
Part of CKL 1000 with stand alone kit
Optional accessory for CKL 2400

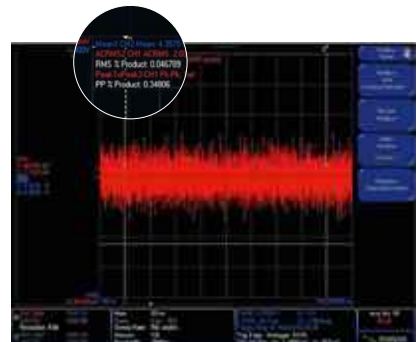
Features of the LASOS® DPSS laser series:



Excellent long-term power and pointing stability



Exceptional good beam quality



Low noise