

## LASOS® LDM laser series



Laser diode modules fiber coupled  
Laser diode modules free beam

Distribution in the UK & Ireland



Characterisation,  
Measurement &  
Analysis

**Lambda Photometrics Limited**

Lambda House Batford Mill

Harpden Herts AL5 5BZ

United Kingdom

E: [info@lambdaphoto.co.uk](mailto:info@lambdaphoto.co.uk)

W: [www.lambdaphoto.co.uk](http://www.lambdaphoto.co.uk)

T: +44 (0)1582 764334

F: +44 (0)1582 712084



## Laser diode modules fiber coupled

### LASOS® LDM laser series

The LASOS® LDM laser series provide excellent beam quality in a variety of wavelengths based on the latest generation of laser diodes in the visible. Special features are:

- Compact and robust housing with fully integrated electronics
- Single mode output with high beam quality
- High power stability due to power control loop
- Direct modulation of the output power
- Low noise
- Adjustment free fiber coupling available
- Suitable for all plug-in system solutions

The LASOS LDM laser series provide the ideal products for applications in bioanalytical research, particle measurements, confocal microscopy, metrology, industrial measurements, testing, medical, science, or education.

Customized solutions for specific applications are possible.

	VLD F▼▼▼▼	BLD F▼▼▼▼	GLD F▼▼▼	RLD F▼▼▼	SLD F▼▼▼	TLD F▼▼
Wavelength [nm]	405 415 425 445 457 460 473 488	505 515 520 638 660 685	705 730 785	808 830		
Max. output power [mW]	125 50 50 40 40 40	125 30 30 50 75 65	25 20 20 60	70 125		
Fiber Coupling		Pigtail				
Fiber type*		Single mode, polarization maintaining				
Fiber length*		2 m				
Fiber connector*		FC 8° polish				
Fiber jacket*		Standard: 3 mm PVC (PVC)				
*For full range of options see catalogue LASOS Fiber series						
Spectral width (FWHM)		< 3 nm				
Polarization**		> 80:1				
Operation temperature		15 °C...40 °C				
Optical noise***		< 1% rms				
Power stability over 8 h		< ± 2 %				
**at fiber output ***[30 Hz...10 MHz]						
Analog modulation						
in power control mode		1 MHz				
in current control mode		100 MHz				
Modulation signal		0...10 V				
Laser enable/disable		TTL Signal, 1 MHz				
Extinction ratio		≥ 1.000.000:1				
Operating voltage		12 V ± 0.1V				

### Model key for orders and enquiries:

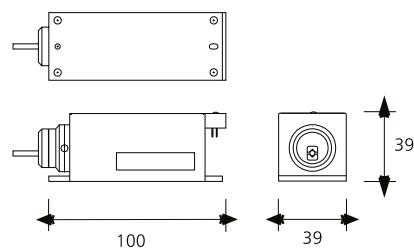
Model - Wavelength - Output power - Fiber jacket  
(example: VLD F - 405 - 125 - PVC)

### Options:

- Collimated output
- Precision plug (on request)
- Customized OEM versions

### LDM fiber coupled:

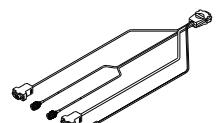
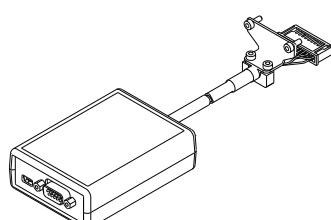
Dimensions laser head [mm]:

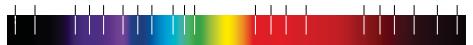


### Accessory: Stand alone kit for LASOS LDM laser series:

ComBox CLD 1000 with USB interface:

Multi I/O cable with RS232, analog and digital inputs:





## Laser diode modules free beam

DLD▼▼ VLD▼▼▼▼ BLD▼▼▼ GLD▼▼▼ RLD▼▼▼ SLD▼▼▼ TLD▼▼

Wavelength [nm]	375 395 405 415 425 445 457 460 473 488 505 515 520 638 660 685 705 730 785 808 830
Max. output power [mW]	60 100 250 100 100 80 80 80 250 60 60 100 150 130 50 40 40 120 140 250
Beam diameter	0.8 mm
Beam divergence	≤ 1.3 mrad
Spot roundness	0.5...1.0
Beam quality M <sup>2</sup>	< 1.3 (TEM <sub>00</sub> )
Coupling efficiency into single mode fiber	≥ 70 %
Pointing stability	< 6 μrad/K
Spectral width (FWHM)	< 3 nm
Polarization ratio**	> 100:1
Operation temperature	15°C...40°C
Optical noise***	< 1% rms
Power stability over 8 h	< ± 2%
**at fiber output ***[30 Hz...10 MHz]	
Analog modulation	
in power control mode	1 MHz
in current control mode	100 MHz
Modulation signal	0...10 V
Laser enable/disable	TTL Signal, 1 MHz
Extinction ratio	≥ 1.000.000:1
Operating voltage	12 V ± 0.1V

### Model key for orders and enquiries:

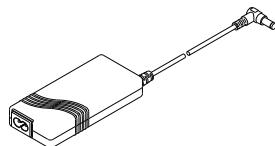
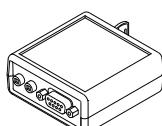
Model - Wavelength - Output power  
(example: VLD - 405 - 250)

### Options:

- Customized OEM versions

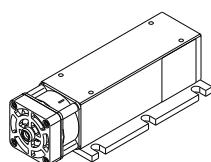
SwitchBox SSL 1000,  
CDRH compliant:

Power supply 12 V, power cord included:



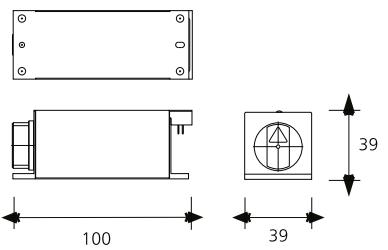
### Heat sink LHA 1200:

Operating voltage: 12 VDC  
Operating current: 80 mA  
Recommended for all laser heads:



### LDM free beam:

Dimensions laser head [mm]:



100

39

Distribution in the UK & Ireland



**Lambda Photometrics Limited**  
Lambda House Batford Mill  
Harpenden Herts AL5 5BZ  
United Kingdom  
E: [info@lambdaphoto.co.uk](mailto:info@lambdaphoto.co.uk)  
W: [www.lambdaphoto.co.uk](http://www.lambdaphoto.co.uk)  
T: +44 (0)1582 764334  
F: +44 (0)1582 712084