

# LASOS

For worldwide photonics

LASOS Lasertechnik GmbH  
Franz-Loewen-Str. 2, 07745 Jena  
Germany

Phone: +49 3641 2944 0  
Fax: +49 3641 2944 300  
info@lasos.com

[www.lasos.com](http://www.lasos.com)



## Europe

### Benelux

Te Lintelo Systems BV  
Phone: +31 316 340804  
Fax: +31 316 340805  
sales@tlsbv.nl  
www.tlsbv.nl

### Czech/Slovakia Republic

LAO industrial systems, s.r.o.  
Phone: +42 241 046800  
Fax: +42 241 046850  
info@lao.cz  
www.lao.cz

### Estonia / Latvia / Lithuania

UAB Altechna  
Phone: +370 5 2725738  
Fax: +370 5 2723704  
instruments@altechna.com  
www.instruments.altechna.com

### France

ACAL BFI France SAS  
Phone: +33 1 60795900  
Fax: +33 1 60798901  
info.fr@bfioptilas.com  
www.bfioptilas.com

### Italy

Laser Optronics Srl  
Phone: +39 2 574651  
Fax: +39 2 57410127  
lop@laseroptronic.it  
www.laseroptronic.it

### Poland

Lambda System  
Phone: +48 22 622 20 14  
Fax: +48 22 622 20 14  
office@lambdasystem.pl  
www.lambdasystem.pl

### Russia

NANOINTEK Ltd.  
Tel.: +7 495 332 00 39  
Fax: +7 495 332 06 20  
info@nanointek.com  
www.nanointek.ru

### Sweden / Norway / Denmark / Finland

Optonyx AB  
Phone: +46 855 111410  
Fax: +46 855 111415  
info@optonyx.com  
www.optonyx.com

### United Kingdom/Ireland

Lambda Photometrics Limited  
Phone: +44 1582 764334  
Fax: +44 1 582 712084  
contact@lambdaphoto.co.uk  
www.lambdaphoto.co.uk

## America

### USA/Canada/Mexico

LASOS US Sales  
Phone: +1 760 305 8265  
us-sales@lasos.com  
www.lasos.com

## Asia

### China / Hong Kong

Universal (Hong Kong) Technology Co., Ltd. Beijing Office  
Phone: +86 10 51690388407  
Fax: +86 10 51690100  
jacky.zhang@universaltechno.cn  
www.universaltechno.cn

### India

Photonics Marketing Company  
Phone: +91 22 3265 7126  
Fax: +91 22 2566 1863  
info@photonics-marketing.com  
www.lasos.com

### Japan

Japan Laser Corporation  
Phone: +81 3 52850861  
Fax: +81 3 52850860  
jlc@japanlaser.co.jp  
www.japanlaser.co.jp

### Korea

DongWoo Optron Co., Ltd.  
Phone: +82 31 7650300  
Fax: +82 31 7650222  
optron@optron.co.kr  
www.optron.co.kr

### Taiwan

Tayhwa Technology Co., Ltd.  
Phone: +886 2 23569737  
Fax: +886 2 23569659  
tayhwa@tayhwa.com.tw  
www.tayhwa.com.tw

# LASOS® LDM-XT laser series



Next generation laser diode modules



### LASOS® LDM-XT laser series

The LASOS® LDM-XT laser series is the latest generation of laser diode modules designed to fulfil specific customer's needs for a particular application. Its modular concept allows adapting different requirements regarding optical and electrical properties. Whether it is delivered as an OEM component for instrumentation or for stand alone applications in science or research the customer has the choice between several options which ensure always the best price-performance ratio. With its compact and robust housing, easy setup and intelligent control the LASOS® LDM-XT laser series is the ideal choice when reliability and accuracy matter.

The laser diode modules are available in a free beam version or with a permanently aligned coupling into a single mode polarization maintaining fiber. The fiber patchcord can be designed by the customer choosing from various options regarding jacket and connectors. Additionally, the customer can choose from a range of optomechanical components like precision fiber plugs and sockets for adjustment free docking to an instrument or beam combining to transfer several beams into one collinear beam or one fiber. Based on these features the new LASOS LDM-XT series is the best choice for

- Microscopy
- Flow Cytometry
- Bioanalytical Research
- Industrial Measurement
- Testing
- Science and Education

Wavelength <sup>1)</sup> [nm]	Model key	Free beam (TS version)		Fiber coupled (FS version)	
		Max. output power [mW]	Standard output power [mW]	Available options	
▶ 375	DLD-XT 37560	60	n/a	C H	
▶ 395	DLD-XT 395100	100	n/a	C H	
▶ 405	VLD-XT 405300	300	180	C E H	
▶ 415	VLD-XT 415120	120	75	C E H	
▶ 425	VLD-XT 425125	125	75	C E H	
▶ 445	VLD-XT 445100	100	60	C E H	
▶ 457	BLD-XT 457100	100	60	C E H	
▶ 473	BLD-XT 473100	100	60	C E H	
▶ 488	BLD-XT 48830	30	15	C E N	
▶ 488	BLD-XT 488100	100	60	C E N	
▶ 488	BLD-XT 488200	200	120	C E H	
▶ 505	GLD-XT 50580	80	50	C E H	
▶ 515	GLD-XT 51540	40	25	C E N	
▶ 515	GLD-XT 51580	80	50	C E H	
▶ 520	GLD-XT 52050	50	30	C H	
▶ 633	RLD-XT 63390	90	55	C E H	
▶ 638	RLD-XT 638200	200	120	C E H	
▶ 660	RLD-XT 66035	35	20		L
▶ 660	RLD-XT 660120	120	75	C E H	
▶ 685	RLD-XT 68545	45	30		L
▶ 685	RLD-XT 68550	50	30	C E H	
▶ 705	SLD-XT 70540	40	25	C E H	
▶ 730	SLD-XT 73040	40	25	C E H	
▶ 785	SLD-XT 78590	90	55		L
▶ 785	SLD-XT 785200	200	120	C E H	
▶ 808	TLD-XT 808150	150	90	C E H	
▶ 830	TLD-XT 830260	260	155	C E H	

<sup>1)</sup> without option N or L: typically ± 5 nm (selection on request)

For enquiries specify: Model key Version Options, Example VLD-XT 405300 TS CH, BLD-XT 48850 FS N

Available matching options:

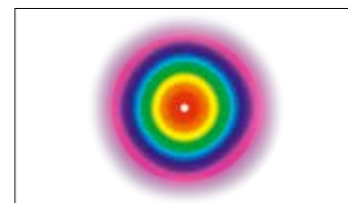
FS Fiber coupling



N Narrow bandwidth  
(Reduced spectral width)



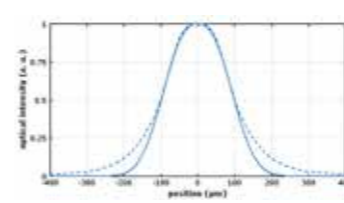
C Circular beam



H SHINE (Speckle Homogenizer and Image Noise Eraser)



E Enhanced beam quality



L Longitudinal singlemode  
(High coherence length)



### General specifications:

Parameter	Unit	Specification	Option	Specification	Remark
Beam diameter	mm	0.8			other diameter on request
Spot roundness		0.5...1	C	0.9...1	
Spectral width	nm	<3	N	<1	center wavelength ± 1 nm
	pm		L	<0.1	typical
Beam quality	M <sup>2</sup>	≤1.3	E	<1.2	TEM <sub>00</sub>
Power stability	%	<±2			over 8 h
Pointing stability	μrad/K	<6			free beam
Optical noise	% rms	<0.5			30 Hz ... 10 MHz
Polarization ratio		>100:1	FS	>80:1	

Operation voltage 12 V ± 0.1 V, operation temperature 15°C ... 40°C, storage temperature -10°C ... 55°C

### Modulation in power control mode

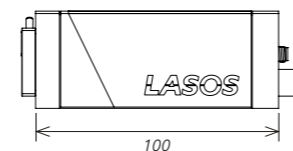
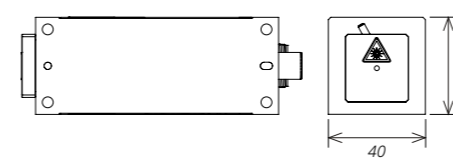
	Analog	Digital
Rise/Fall time	<1 μs	<1 μs
Max. bandwidth	1 MHz	1 MHz
Max. modulation depth	1:100 (1MHz)	1:infinity
SHINE option	Available	Available

### Modulation in current control mode

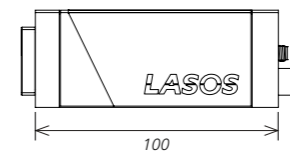
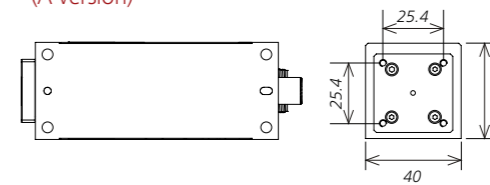
	Analog	Digital
Rise/Fall time	< 10 ns	< 10 ns
Max. bandwidth	100 MHz	1 MHz
Max. modulation depth*	1:25 (50 MHz)	1:25 (50 MHz)
SHINE option	Not available	Not available

\* higher bandwidth on request.

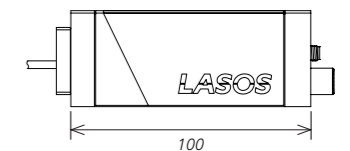
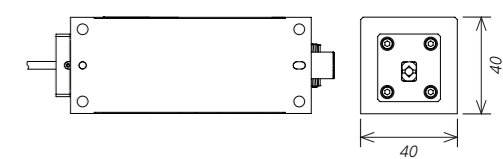
### Free beam with shutter (TS version)



### Free beam with adapter plate (A version)

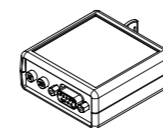


### Fiber coupled with shutter (FS version)

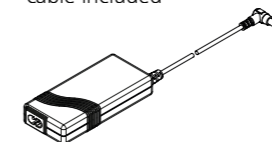


### Accessory: Stand alone kit for LASOS LDM-XT laser series:

SwitchBox SSL 1000,  
CDRH compliant

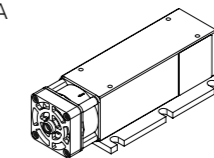


Power supply 12 V,  
power cord and interface  
cable included



### Heat sink LHA 1200:

Operating voltage: 12 V DC  
Operating current:  
80 mA



### Software:

LASOS Commander

