

LASOS

For worldwide photonics

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 ore one fiber. Based on these features the new LASOS LDM-XT series is the best choice for

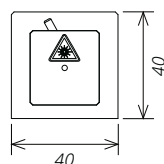
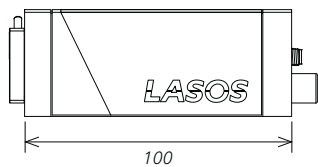
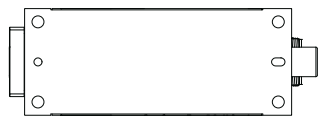
- Microscopy
- Flow Cytometry
- Bioanalytical Research
- Industrial Measurement
- Testing
- Science and Education

Wavelength ¹⁾ [nm]	Model key	Free beam (TS version)	Fiber coupled (FS version)	Available options			
		Max. output power [mW]	Max. output power [mW]				
▶ 375	DLD-XT 75	60	n/a	C	H		
▶ 395	DLD-XT 95	100	n/a	C	H		
▶ 405	VLD-XT 05	250	150	C	E	H	L
▶ 415	VLD-XT 15	100	60	C	E	H	
▶ 425	VLD-XT 25	100	60	C	E	H	
▶ 445	VLD-XT 45	80	45	C	E	H	
▶ 457	VLD-XT 57	80	45	C	E	H	
▶ 460	BLD-XT 60	80	45	C	E	H	N
▶ 473	BLD-XT 73	80	45	C	E	H	N
▶ 488	BLD-XT 88	180	100	C	E	H	N
▶ 505	GLD-XT 05	60	35	C	E	H	N
▶ 515	GLD-XT 15	60	35	C	E	H	N
▶ 520	GLD-XT 20	70	40	C	E	H	N
▶ 633	RLD-XT 33	90	50	C	E	H	L N
▶ 638	RLD-XT 38	150	90	C	E	H	L N
▶ 660	RLD-XT 60	130	75	C	E	H	L N
▶ 685	RLD-XT 85	50	30	C	E	H	L N
▶ 705	SLD-XT 05	40	20	C	E	H	N
▶ 730	SLD-XT 30	40	20	C	E	H	N
▶ 785	SLD-XT 85	120	70	C	E	H	L N
▶ 808	TLD-XT 08	140	80	C	E	H	N
▶ 830	TLD-XT 30	250	150	C	E	H	N

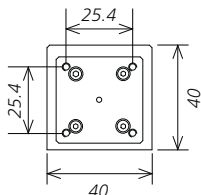
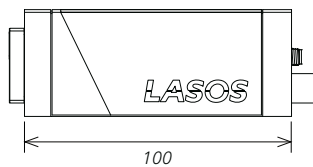
¹⁾ typical ± 5 nm, selection on request

For enquiries specify:
 Model key Output power Version Options
 (Example: VLD-XT 05250 TS CEHLN, VLD-XT 05125 FS CEHLN)

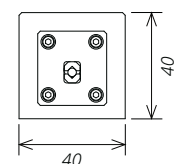
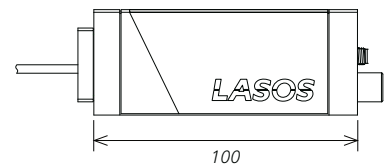
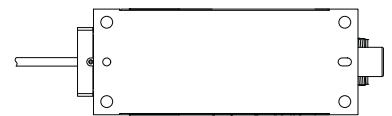
Free beam with shutter (TS version)



Free beam with adapter plate (A version)



Fiber coupled with shutter (FS version)

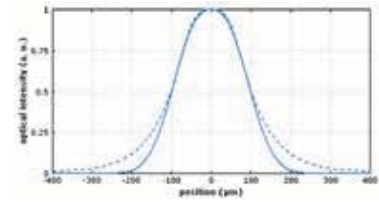
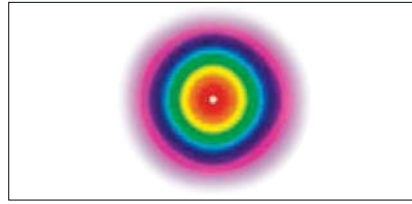




FS Fiber coupling

C Circular beam

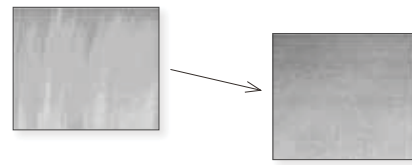
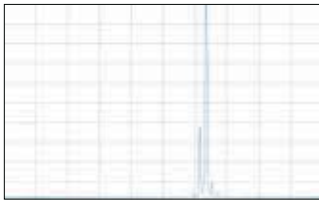
E Enhanced beam quality



N²) Narrow bandwidth
(Reduced spectral width)

H SHINE
(Speckle Homogenizer and Image Noise Eraser)

L Longitudinal singlemode
(High coherence length)



²) on request, ask for lead time

General specifications:

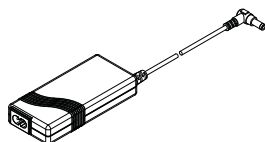
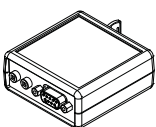
Parameter	Unit	Specification	Option	Specification	Remark
Beam diameter	mm	0.8			other diameter on request
Spot roundness		0.5... 1	C	0.9... 1	
Spectral width	nm	<3	N	<1	center wavelength ± 1 nm
	pm		L	<0.1	typical
Beam quality	M ²	≤ 1.3	E	<1.2	TEM ₀₀
Power stability	%	<±2			over 8 h
Pointing stability	µrad/K	<6			free beam
Optical noise	% rms	<0.5			30 Hz ... 10 MHz
Polarization ratio		>100:1	FS	>80:1	
Max. modulation frequency	MHz	1			in power control mode
	MHz	300			in current control mode
Max. modulation depth		500:1			in power control mode
Modulation signal	V	0...5			
Laser enable/disable	MHz	1			extinction ratio ≥ 1.000.000:1
SHINE option			H		enable/disable

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

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

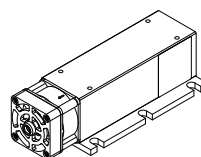
SwitchBox SSL 1000,
CDRH compliant

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



Distribution in the UK & Ireland



**Characterisation,
Measurement &
Analysis**

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