LASOS
For worldwide photonics

LDM-XT laser series

Compact laser diode modules, free beam and fiber coupled

- Large variety of wavelengths from 375 nm to 980 nm
- Stand-alone and OEM design available
- Outstanding long term stability
- Excellent beam quality
- Reliable and robust
- Maintenance free
- Compact design
- Free beam and fiber coupled version available
- Software control
- Firmware integration possible
- Customization on request

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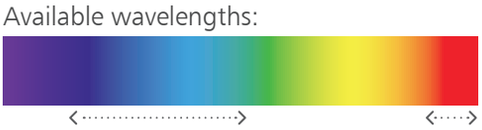
LASOS LDM- XT laser series

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 electronical properties, whether it is delivered as an OEM component for instrumentation or for stand alone applications in science or research. The customer has several options to ensure 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 matters. 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 output may be customized. The customer can choose between different assembly options regarding fiber and output. Combined with LASOS optomechnics like the precision plug system it can be made a versatile tool in complex optical setups.

Based on these features the LASOS LDM-XT series is the best choice for

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

Available wavelengths:



General Specifications

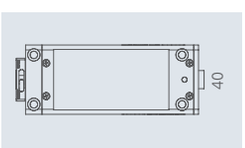
Wavelengths (nm)	375, 395, 405, 415, 425, 445, 457, 473, 488, 488, 488, 505, 515, 515, 520, 633, 638, 660, 660, 685, 685, 705, 730, 785, 785, 808, 830, 980
Spectral width (FWHM)	typ. <3 nm, optional < 0.5 nm[1]
Operating voltage	12 V
Output power	Up to 250 mW depending on wavelength
Output power stability over 8 h	<±2.0 %
Noise 10 Hz … 20 MHz	< 0.5 % rms
Warm up period	< 10 min
Pointing stability	< 6 μrad K^{-1}
Polarization ratio	≥ 200:1

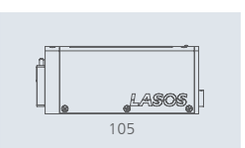
	Free beam	Fiber coupled
Transversal mode M^2	< 1.3 (optional <1.2)	<1.2
Beam waist diameter ($1/e^2$)	0.8 mm	N/A (optional collimation)
Beam roundness	0.5 … 1 (optional 0.9…1)	0.9…1

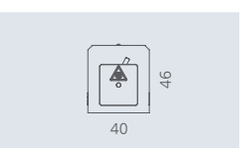
Modulation in power control		
Rise / Fall time	<1 μs	
Max. Bandwidth / Mod. depth	1 MHz / 1:100	
	Analog	Digital
Rise / Fall time	< 10 ns	< 10 ns
Max. Bandwidth / Mod. depth	100 MHz / 1:4	1 MHz

[1] Available for 488 and 514 nm, others on request, no direct modulation possible
[2] 1 MHz / 1:100, 50 MHz 1:20

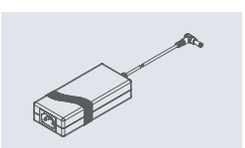
Dimensions

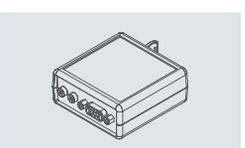






Accessory





Stand-alone kit with power supply and SwitchBox

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