

LASOS® **LDM-XT laser series**

Next generation laser diode modules
Free beam with shutter and adapter plate
80 mW at 457 nm



BLD-XT 457XX TS

BLD-XT 457XX A

- Outstanding long term stability
- Excellent beam quality
- Reliable and robust
- Maintenance free
- Compact design
- Suitable for OEM applications
- Software control via integrated USB
- Customization on request

Distribution in the UK & Ireland



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Next generation laser diode module

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 | 457 nm ± 5 nm |
| Spot roundness | 0.5...1 |
| Beam diameter | 0.8 mm ± 0.3 mm |
| Spectral Linewidth | < 3 nm |
| Output power | 80 mW |
| Output power stability within 8 h | ≤ ±2.0 % |
| Noise 30 Hz ... 10 MHz | ≤ 0.5 % rms |
| Warm up period | < 10 min |
| Beam quality M ² | ≤ 1.3 |
| Pointing stability | < 6 μrad K ⁻¹ |
| Polarization ratio | ≥ 100:1 |
| Operating voltage | 12 V ± 0.1 V |
| Accessory | SwitchBox SSL 1000, 12 V power supply |
| Output type | Free beam with shutter or adapter plate |

Modulation Parameter LDM-XT laser series

Power control mode

Analog modulation

| | |
|-----------------------------------|---------|
| Control Voltage | 0...5 V |
| Rise/Fall time | < 1 μs |
| Switching between 2 analog values | < 1 μs |
| Max. bandwidth | 1 MHz |
| Modulation depth | 1:100 |

Digital Modulation

| | |
|------------------|------------|
| Control Voltage | TTL On/Off |
| Rise/Fall time | < 1 μs |
| Max. bandwidth | 1 MHz |
| Modulation depth | 1:∞ |

Current control mode

Analog modulation

| | |
|------------------------------------|----------------|
| Control Voltage | 0...5 V |
| Rise/Fall time | < 10 ns |
| Switching between 2 analog values | < 10 ns |
| Max. bandwidth | 100 MHz |
| Modulation at 1 MHz/50 MHz/100 MHz | 1:100/1:20/1:4 |

Digital Modulation

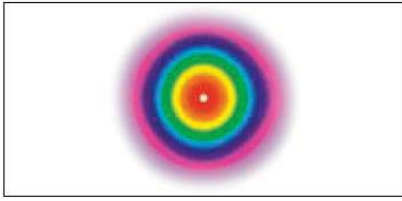
| | |
|------------------|------------|
| Control Voltage | TTL On/Off |
| Rise/Fall time | < 10 ns |
| Max. bandwidth | 1 MHz |
| Modulation depth | 1:∞ |

LASOS

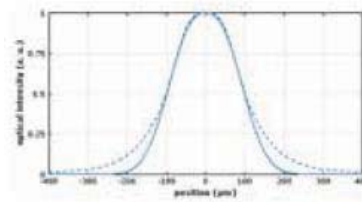
For worldwide photonics

Options on request

C Circular beam

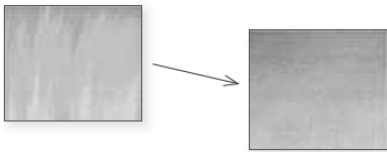


E Enhanced beam quality



H SHINE

(Speckle Homogenizer and Image Noise Eraser)

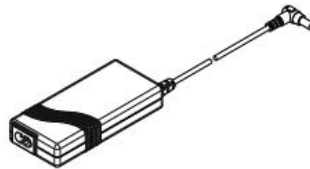


Accessory:

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

SwitchBox SSL 1000,
CDRH compliant

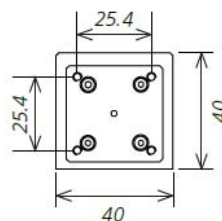
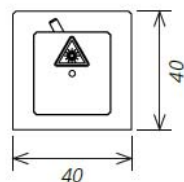
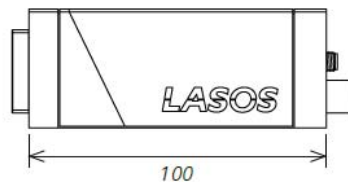
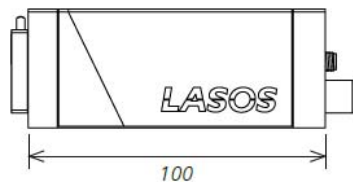
Power supply 12 V,
power cord and
interface cable included



Dimensions:

Free beam with shutter
(TS version)

Free beam with adapter plate
(A version)



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