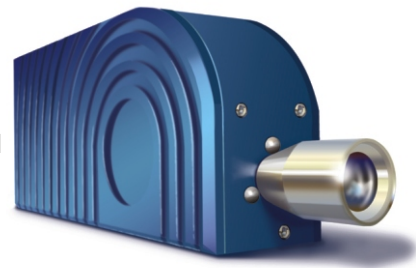


## High stabilized Laserdiode-Modules

**Highpower LDM-Series**  
UV / blue / violet - digital modulated



Product Specifications	
Power @ wavelength (further wavelengths on request)	375 nm / 40 mW, 440 nm / 40 mW 473 nm / 40 mW 405nm (-5nm/+15nm selectable) >100mW (typically 110mW) 445 nm / 100 mW
Rise & Fall Time	<1ns (0-100%)
Max. Modulation Frequency	> 500Mhz digital
Modulation Depth - digital -	250:1 @ 150 or 500Mhz
Pulse-to-Pulse Stability	<0,5% @ 200Mhz
Noise RMS (20 Hz - 500Mhz)	<1%
Pointing stability	<5μrad/°C
Power stability	<0,5% over 1h, <2% over 8h

Beam Parameters	
Beam Waist Diameter at 1/e <sup>2</sup>	1,1mm +/- 10%, up to 15mm on Request
Spatial Mode (Far Field)	TEM <sub>00</sub>
Ellypticity	<0,2 x Z <sub>R</sub> (Factory adjusted)
Astigmatism	
Beam Divergence (Full Angle)	<0,7mrad @ 1,1mm
Static Alignment Tolerances	±250μm (x/y) ±2mrad (angle)

Laser Head Specifications	
ESD Protection	Level 4 (air and contact)
Dimensions max. (L x W x H)	214mm x 50mm x 87mm (93,5mm) (length depends on used optics)
Beam Height	23,5mm or 30 mm (with Baseplate)
Weight	1500g
Operating Temperature	15°C - 40°C
Storage Temperature	-20°C - 60°C
Max. Heat Load from Laser Head	6W

Controller Specifications	
ESD Protection	Level 3 (air and contact)
Computer-Interface	RS-232 with custom Command-Interface galvanic-shielded (500V-AC barrier)
Weight	ca. 2 x 250 g
Dimensions (L x W x H)	2 pcs. of 165 x 130 x 44mm in galvanic-shielded Housing (500V-AC barrier)

DC Input Requirements	
Input Voltage	18-36VDC nominal 24VDC optional 85 - 245 VAC 50/60 Hz
Input Power	2 x <25W

### Main features of the LDM-Series

- Extremely compact design on european and US-american guidelines
- Separable laserhead and controlling unit
- Active temperature stabilized
- Flexible to customized specifications
- High efficiency of optical design, > 95%
- Astigmatism adjustable
- Fast modulation > 500MHz

