



High stabilized Laserdiode-Modules

LDM-Series red / IR
digital modulated

Product Specifications

Power @ wavelength (further wavelengths on request)	635nm, 639nm, 658nm, 665nm, 690nm, 785nm, 810nm, 830nm, 852nm up to 150 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 ²	1,1mm +/- 10% up to 15 mm on request
Spatial Mode (Far Field)	TEM ₀₀
Ellipticity	< 1,2:1
Beam Divergence (Full Angle)	< 1mrad @ 1,1mm
Static Alignment Tolerances	+/- 250µm (x/y) +/- 2mrad (angle)
Polarisation	>100:1, linear or vertical (other angles on request)

Laser Head Specifications

ESD Protection	Level 4 (air and contact)
Dimensions max. (L x W x H)	115mm x 66mm x 43mm (length depends on used optics)
Beam Height	25,5mm
Weight	350 g
Operating Temperature	+15°C - +40°C
Storage Temperature	-20°C - +60°C
Max. Heat Load from Laser Head	3W

Controller Specifications

ESD Protection	Level 4 air / Level 3 contact
Weight	350g
Dimensions (L x W x H)	165 x 130 x 44 mm in galvanic-shilded housing (500V-AC barrier)

DC Input Requirements

Input Voltage	18-36 VDC nominal 24 VDC
Input Power	< 20 W

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 digital modulation up to 500 MHz





Applications

The Laser modules of the LDM series are predestined to the following applications because of their high quality, their interesting wave-lengths for technical processes and their outstanding optical features.

- *LASER-PRINT Industry*
- *Medical diagnosis*
- *Process of fluorescence*
- *CD Mastering*
- *Exposure*
- *Laboratory applications*

Contact in Singapore



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