

# LDM Series

## SINGLE/DUAL WAVELENGTH VIS-NIR DIODE LASER MODULE



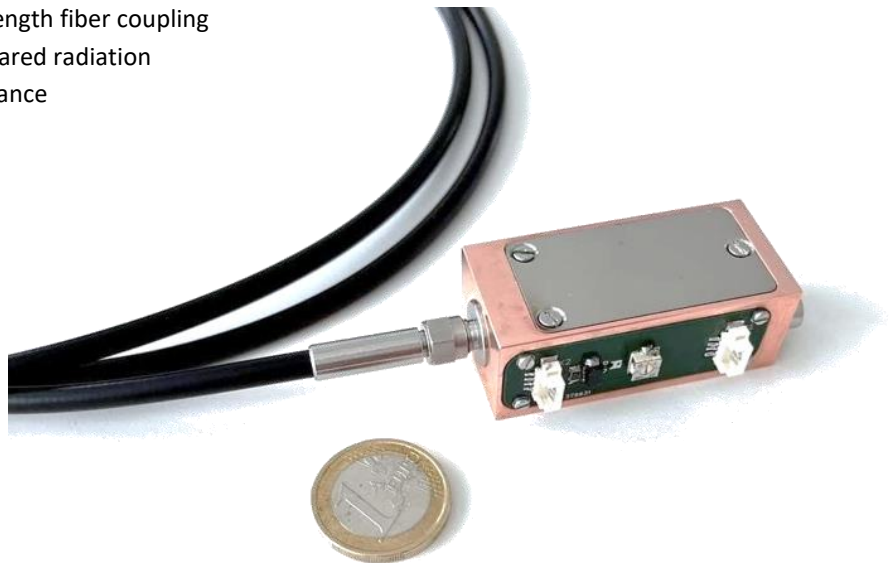
LDM is a family of OEM fiber coupled diode laser modules specifically designed for medical applications. Available as single or dual wavelength configuration, it covers the whole visible and near-infrared radiation range, thus being suitable for a variety of treatments. Equipped with temperature sensor, photodiode, aiming beam and fiber detect sensor, compact and designed for flexible customization, LDM is the perfect choice for your medical equipment.

### FEATURES AND BENEFITS

- Multi-configuration OEM module
- Very efficient single/dual-wavelength fiber coupling
- Violet – blue – green – red – infrared radiation
- Flexible design, custom performance
- Ease of integration
- Long lifetime > 30,000 hours

### APPLICATIONS

- Dental
- Vascular
- Surgery
- Physiotherapy
- Biostimulation
- Veterinary



### TECHNICAL SPECIFICATIONS

Primary wavelength	VIS-NIR (see table)
Output power – primary	1 – 12W CW (see table)
Secondary wavelength – standard (*)	635nm
Output power – secondary (*)	0.5W
Operational mode	CW / pulsed
Beam delivery	Optical fiber
Fiber type	SMA >100µm NA 0.22 (**)
Cooling	Passive
Available options:	NTC, photodiode, aiming beam, fiber detect sensor

Conditions unless otherwise stated: typical parameters at 25°C

\* All configurations from table are possible, custom or semi-custom design required depending on selections

\*\* Depending on configuration

## SELECTION TABLE

LDM is available as single wavelength module (Primary  $\lambda$ ) or combination of two wavelengths as described by table below: the optical power indicated refers to the maximum available diode power at that specific wavelength.

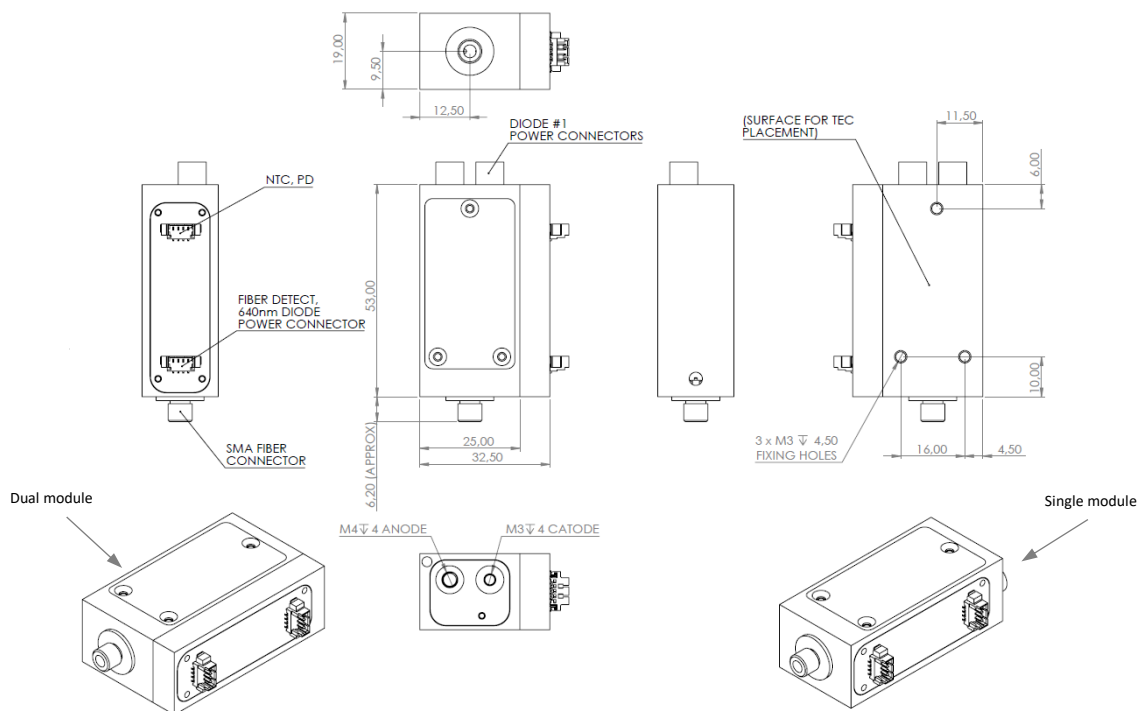
	Primary $\lambda$								
	405nm 1W	445nm 6W	520nm 1.5W	635nm 1W	808nm 10W	980nm 12W	1064nm 8W	1120nm 8W	
Combination $\lambda$	405nm 1W	•			✓	✓	✓	✓	
	445nm 6W		•		✓	✓	✓	✓	
	520nm 1.5W			•	✓	✓	✓	✓	
	635nm 1W	✓	✓	✓	•	✓	✓	✓	
	808nm 10W	✓	✓	✓	✓	•		✓	
	980nm 12W	✓	✓	✓	✓		•		
	1064nm 8W	✓	✓	✓	✓	✓		•	
	1120nm 8W								•

## APPLICATION TIPS

Find our application tips and insights at the following links:

- <https://www.lyocon.com/applications/dental-surgery-periimplant/>
- <https://www.laserfocusworld.com/biooptics/article/14235326/laser-therapy-for-pain-relief-current-and-future-trends>

## MECHANICAL INTERFACE



Lyocon aims to continuous improvement of its products, so specifications may change without notice. Class 4 Laser Product.