# **High Brightness**

## Visible Diode Laser



- · Tapered laser diode
- · High brightness (spatial & spectral)
- · Round & Astigmatism free beam (free space)
- · Efficient fiber coupling over full power range
- · Tophat beam profile (fiber end)
- · Microsecond pulses



### **Specifications**

	DLM-1 (VIS)
Optical Parameters	
· Wavelength	532 nm or 577 nm
· Output Power (CW)	(1 - 2) W
· Pulse Duration	50 μs - CW
· Duty Cycle	[0 - 100] %
· Mode of Operation	CW & Pulsed
· Spectral Width (FWHM)	< 30 pm
· M² Factor	< 2
· Polarization	Linear
Fiber	
· Core Diameter	< 50 μm (0.1 NA)
· Beam Profile	Top Hat like
Electrical Parameters	
· Input Voltage	24 V
· Input Current	2.5 A
Mechanical Dimensions	
· Dimension (L x W x H)	$\sim$ (120 x 56 x 25) mm <sup>3</sup>
· Weight	∼ 300 g
Thermal Parameters	
· Operating Temperature	(15 - 30) °C
· Heat Sink Capacity	100 W
Thermal Parameters	
· Communication	RS232 / Mini USB
· Emergency Stop	Potential free / dual
· Current Monitor	Analog (0 - 4) V
· Trigger In / Out	TTL 5 V
· Current Set	Analog (0 - 4) V



#### Laser Diode Drivers

The TLDD is an economic pulsed and CW laser diode driver module designed to provide high current pulses to drive DLM (VIS/ NIR) laser modules in various applications. It delivers output currents of  $2 \times 12.5 \, \text{A}$  and  $4 \times 750 \, \text{mA}$  and pulse widths variable from  $50 \, \mu \text{s}$  to CW operation. Several safety features are integrated to protect both laser diode and driver.

	TLDD	
Laser Diode Driver		
<ul> <li>Output Current</li> <li>Rise Time (10 - 90%)</li> <li>Mechanical Dimensions (W x D x H)</li> <li>Additional Features</li> </ul>	$2 \times 12.5 \text{ A} (50 \mu\text{s} - \text{CW}) \text{ and } 4 \times 750 \text{ mA} (\text{CW})$ $\leq 50 \mu\text{s}$ (180 x 125 x 70) mm <sup>3</sup> Safety circuit and communication interface	

#### Test and Evaluate



The DLM evalution kits are ready-to-use and straightforward laboratory systems for first feasibility studies in research environment. The evaluation kits are available with different kinds of laser sources (see front page), shortens the development time, enables flexibility and a fast demonstration of feasibility. The test systems are delivered with your requested laser source, a laser control system and a cooling system for laboratory use only.

Please contact us for more information on rental or purchase conditions: info@pantec-biosolutions.com

#### **DLM Applications**

Medical	Industrial
<ul> <li>Ophthalmology</li> </ul>	· Material Processing
<ul> <li>Aesthetics / Dermatology</li> </ul>	· Analytics
· etc.	· etc.