



250 Watt Laser Diode Heat Sink with Air Cooled Base for High Power Lasers

- Ships with Pre-Configured Mounting Plate & Interconnect Cables for your Laser Package Type
- Thermal Resistance R (th): 0.059 K/W
- > 250 Watts of Cooling Capacity
- Standard Mounting Plates for Lumics, JENOPTIK, DILAS, Coherent and nLIGHT Packages
- Custom Mounting Plates Available on Request
- Comes with Connecting Jumper Wires which Match your Laser Diode's Pin Diameter
- Designed for Laser Diodes with Integrated Peltier Coolers and/or Water Fittings

LDM-250W DATA SHEET

WORLD LEADING PRODUCTS
FOR LASER SCIENTISTS AND ENGINEERS

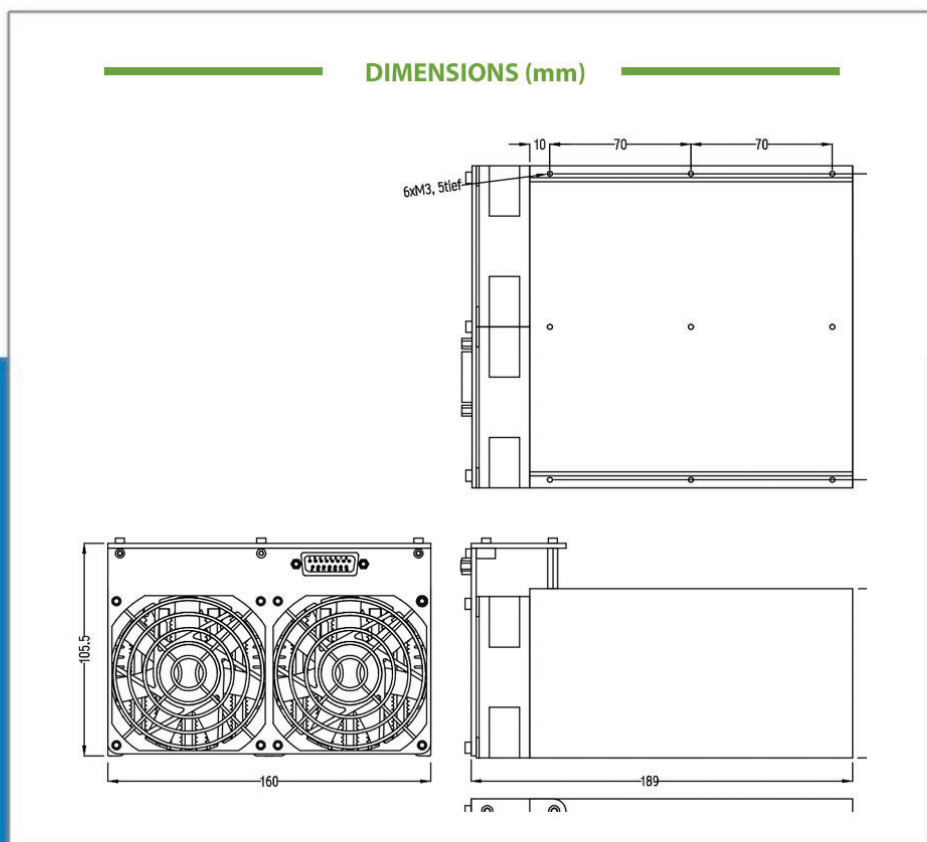
DATA SHEET

LDM-250W Product Overview:

The LDM-250W model heat sinks provide high performance heat removal at an affordable price for high power laser diodes. These heat sinks are designed for lasers which have internal Peltier / TE coolers integrated into the module or for lasers which have water fittings. Dual fans remove the heat from the base. Standard mounting plates are available for most package styles and custom plates are also available.

Passively Cooled Heat Sink:

The LDM-250W is a passively cooled heat sink, meaning that there are no Peltier elements in the unit. The heat emitting from the laser is conducted down through the laser mounting plate through a low thermal impedance plate surface. Two high CFM fans located in the base dissipate the heat from the base of the block into the air. The LDM-250W offers a low thermal impedance of $< 0.059 \text{ K/W}$. mounting surface for the laser being tested. The thermal performance of a passively cooled heat sink is highly dependent on the thermal impedance, or resistance. This measurement is defined in units of degrees Celsius per watt of heat $^{\circ}\text{C/W}$. The thermal resistance allows the user to determine the amount of temperature rise that the laser diode will experience for each watt of thermal energy that is emitted by the device under test. The dual fans in the base greatly improve the thermal performance of the heat sink and allow the user to set the laser temperature to a set-point which is equivalent to the lab ambient temperature. Careful machining of the mounting plate surface finish and surface flatness are also crucial to the heat sink performance.



LDM-250W SPECIFICATIONS

SPECIFICATIONS (@ 25°C AMBIENT)

Heat Load Maximum:	250 Watts
Thermal Resistance R (th):	0.059 K/W
Laser Diode Mounting Area:	100mm x 140mm
Laser Diode Package Footprint (pre-drilled holes):	Customer Specified
Temperature Uniformity:	< 0.5°C Across Mounting Plate Surface
Laser Diode Mounting Plate Surface Flatness:	< 10 µm
Dual Fans Power Requirement:	2 x 24 VDC (14 Watts)
Dual Fans Maximum Noise:	53 dB

COMPATIBLE LASER DIODE PACKAGE STYLES

Submit Your Laser Diode's PDF Data Sheet to Receive the Mounting Plate Part Number
Standard Mounting Plates Available for Most Fiber Coupled Package Styles
Custom Mounting Plates Available on Request

COOLING CAPACITY RELATIVE TO AMBIENT TEMPERATURE

Ambient Temperature 20°C ... Waste Heat Removal 250 Watts
Ambient Temperature 25°C ... Waste Heat Removal 170 Watts
Ambient Temperature 30°C ... Waste Heat Removal 90 Watts

Product Warranty:

In addition to the standard full one year warranty, this product is offered with an additional 3 months of extended warranty for a total of 15 months of warranty coverage. The warranty includes all parts and labor. The warranty does not include customer induced product damage.

Our Customer Commitment:



You Get Direct, Fast Tech-Support from a Product ENGINEER ... Not a Sales Person

You get DIRECT access to the correct factory engineer for your product. We eliminate the sales person "middle-man" back and forth time delays resolving technical issues. No more "Contact Us" forms. Every product has an assigned engineer in our auto-messaging data base to give you direct, immediate access to the correct tech-support info.



You Get an Extended Warranty

All products from Laser Lab Source come with a 12 month factory warranty. Additionally, we offer and extra 3 months of warranty on top of the standard warranty. Warranty does not include customer induced product damage.



You Get the Lowest Factory-Direct Prices Worldwide

All of our 3rd party global suppliers set & quote their own direct pricing. There are NO Mark-Up's. You get their lowest direct price.