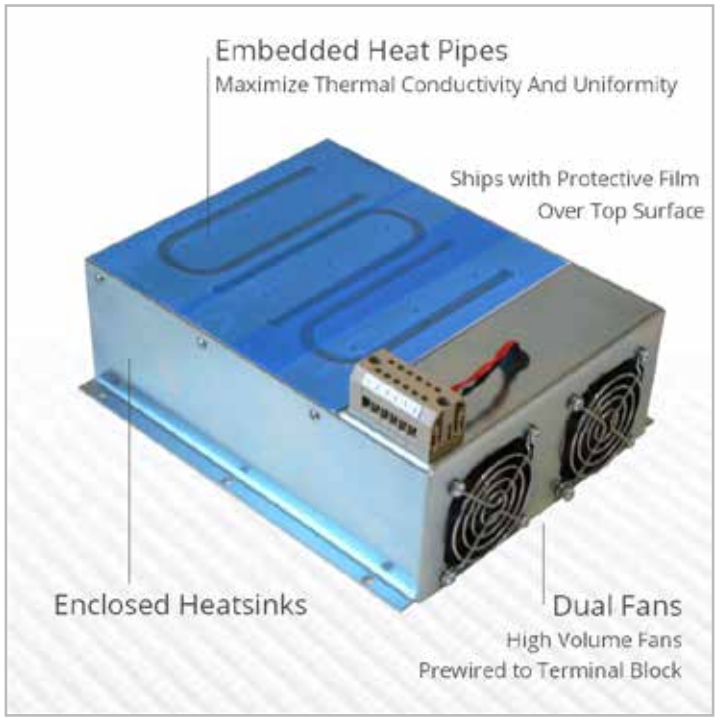
LASER DIODE
SOURCE & CONTROL SYSTEMS

LASER DIODE
HEAT SINKS

150 Watt Laser Diode Mount and Heatsink Assembly

Simple and Effective Heat Removal for High Power Laser Diodes



HS-008 Heatsink, 150 Watt Capacity

- Up to 150 Watts of Laser Waste Heat Removal Capacity
- Compact, Rugged, and Highly Effective
- Two High-Volume Fans, Prewired to Terminal Block
- Thermal Resistance from Mounting Plate to Ambient ~ 0.08°C/W
- Custom Mounting Plates Available on Request

Laser Lab Source
a division of Research Lab Source Corporation

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VERSATILE AND HIGH EFFICIENCY HEATSINK

The HS-008 is an affordable, high quality, versatile integrated heatsink and fan assembly, designed for maximum flexibility across a wide range of applications in your laser diode test lab and prototype shop.

Heatpipes are soldered into the nickel-plated mounting plate to minimize thermal spreading resistance, distribute the heat across the heatsink, and minimize efficiency-robbing thermal hot spots. To protect the surface until you're ready to use it, the mount ships with a protective film over the mounting plate.

The HS-008 is a very affordable solution for a wide range of situations where a fully integrated thermoelectric cooled mount is overkill or over-budget. The HS-008 is perfect when large amounts of heat must be conducted away from the test device, but precision temperature control of the device is not required. The HS-008 provides laser heat dissipation capacity of 150 Watts with 12ºC temperature rise (12ºC without TECs, 0ºC rise with optimized TECs).

The HS-008 heatsink is ideal for a wide variety of fiber-coupled laser packages and modules, IGBTs, high-heat test loads, and the like.

LOW THERMAL RESISTANCE

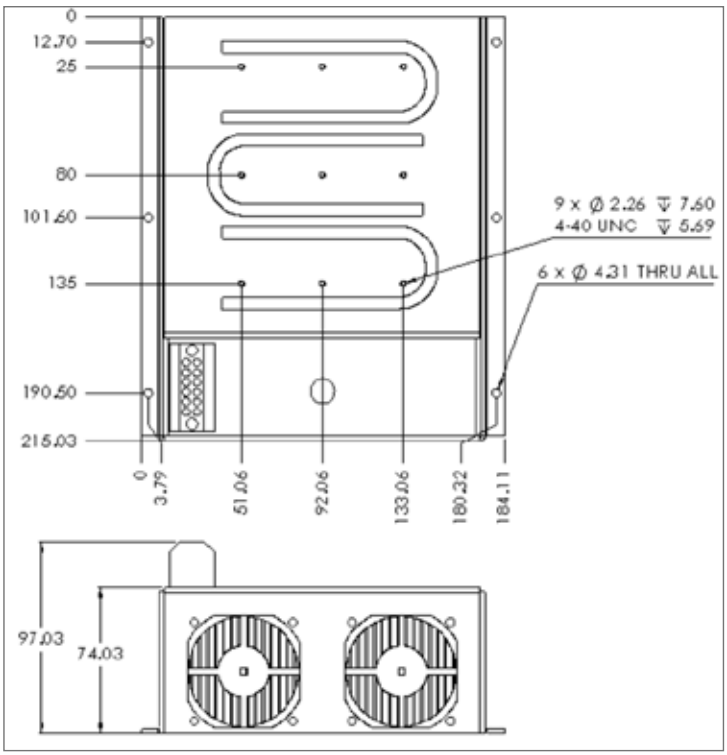
Heatpipes are used in the HS-008 to maximize conduction of heat from the load to the heatsink and improve overall efficiency by reducing local hot-spots on the mounting plate.

The fins on the heatsink are designed to break up laminar airflow, which improves heat dissipation efficiency, as well. Finally, the high fin-density heatsink is enclosed in a sheet metal duct to direct the entire volume of forced air over the fins, thereby providing the low thermal resistance of 0.08 ºC/W. This low thermal resistance means that for every 10 Watts of power input to the heat-sink mounting plate, the temperature of the heatsink surface will rise 0.8 ºC.

CUSTOMIZABLE FOR MAXIMUM VERSATILITY

The functional hole patterns are shown in the dimensions figure below. Custom mounting holes patterns are available upon request.

HEATSINK DIMENSIONS



HS-008 SPECIFICATIONS

Thermal Resistance: 0.08 ºC/W
Heat Dissipation Capacity: 150 W with 12 ºC Temperature Rise
Dimensions (L x W x H): 215 mm x 184 mm x 97 mm
Fan Voltage: 5.5 ~ 13.8 VDC (Nominal 12 VDC)
Fan Input Power: 2x 9.9 Watts
Fan Noise Level: 47 dBA
Refer to data sheet for additional specifications

PRODUCT SALES AND SERVICE

Unlimited phone and email support is provided for products purchased through Laser Lab Source. Orders for this product are fulfilled by Laser Lab Source in North America and select international regions.

PRODUCT WARRANTY

This product is sold with a full one-year warranty. It is warrantied to be free from defects in material and/or workmanship for a period of one year from the date of shipment. The warranty does not cover damage to the to the product due to mishandling or use of the product outside of its specified maximum ratings.

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