



Offered by
LASER LAB SOURCE

manufactured by **AeroDiODE**

1064nm 9W CW Laser Diode Source System (Open Frame) Multi-Mode, Fiber-Coupled Laser Diode



1064NM 9W LASER DIODE SOURCE

- o Output Power: > 9 W (CW)
- o Spectral Width (FWHM): 3.5 nm (typ)
- o 2-Pin High Power Module
- o SMA905 Connector Fiber Termination



CW LASER SOURCE SYSTEM -- 1064LD-4-6-1 / LASER-DIODE / CCM

This 1064nm CW source is built around a highly reliable fiber-coupled laser diode, and delivers a minimum 9W output power. The system is preconfigured and pretested, delivered ready-to-run.

The CCM-CW laser diode controller and mounting module provides precision control of the drive current and the laser temperature. The laser temperature is maintained by an active TEC-controlled heat-sink. The controller system is operated by the included graphical user interface over USB, and allows several source systems to be controlled at the same time.

LASER SPECIFICATIONS

- Wavelength: 1064 nm (\pm 5 nm)
- Output Power: 9 W (CW / Pulse)
- Emission Bandwidth: 3.5 nm (typ)
- Output Fiber Core: 105 μ m, NA 0.22
- Fiber Termination: SMA905
- Wavelength Shift with Temperature: 0.3 nm/ $^{\circ}$ C
- Wavelength Shift w/ Current: 1.0 nm/ $^{\circ}$ C

LASER DIODE CONTROLLER SPECIFICATIONS

- Current Range: 0 - 21 Amps
- Compliance Voltage Range: 0 - 36 Volts
- Current Stability: \pm 0.025% of Full Scale Set-Point Current
- Laser Diode Set-Point Adjustment Resolution: 0.05 Amps
- Control Modes: ACC (constant current) and APC (laser output power feedback from photodiode)

TEC CONTROLLER

- Temperature Control Range (typ): 15 - 40 $^{\circ}$ C
- Temperature Stability (typ): < 0.05 $^{\circ}$ C
- TEC Power: > 150 Watts

MODULATION BANDWIDTH

- Pulse Duration: 10 μ s to CW
- Trigger: External Only

USER INTERFACE AND POWER INPUT

- USB with GUI Software
- Includes Control Software Libraries : DLLs, Hexa, Labview VI

INTEGRATED HIGH POWER LASER DIODE



PRE-CONFIGURED
control electronics
and mount system

EASY TO OPERATE
through USB with GUI
or control software



1064NM MULTIMODE FIBER-COUPLED LASER DIODE

These lasers deliver a minimum of 9 Watts CW or pulsed output power. The typical emission bandwidth is 3.5 nm, and the laser is coupled to multimode 105 μm fiber with $\text{NA} = 0.22$. The laser is provided with SMA905 fiber termination.

This laser diode can be supplied individually, or integrated and tested in a high-quality turn-key control electronics system delivered ready to run.

OPTICAL AND ELECTRICAL SPECIFICATIONS

- Wavelength: 1064 nm (± 5 nm)
- Emission Bandwidth: 3.5 nm (typ)
- CW Output Power: 9 W (min)
- Threshold Current: 0.5 A
- Operating Current: 11.7 A
- Operating Voltage: 1.75 V
- Wavelength Shift with Temperature: 0.3 nm/ $^{\circ}\text{C}$
- Wavelength Shift w/ Current: 1.0 nm/ $^{\circ}\text{C}$
- Slope Efficiency: 0.85 W / A

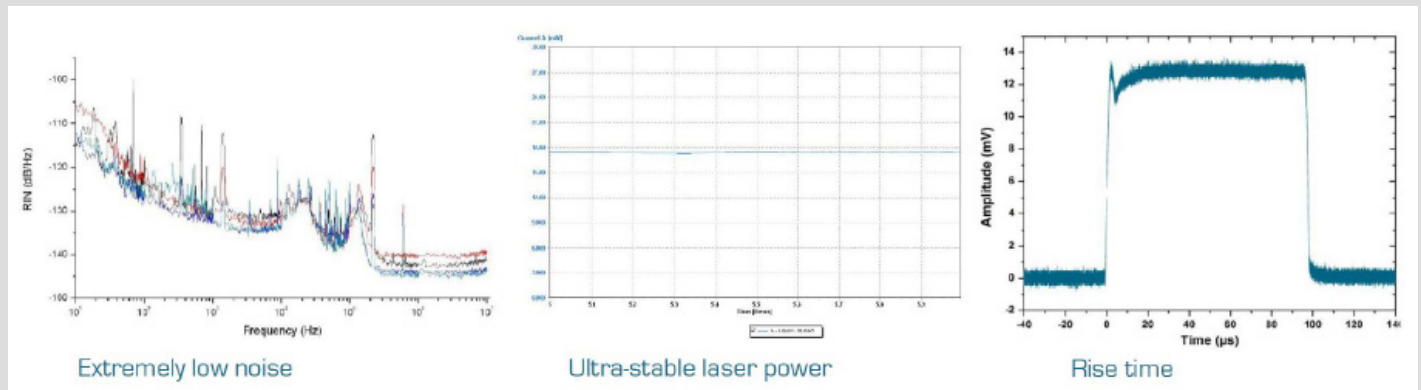
FIBER PIGTAIL

- Multimode 105 μm , $\text{NA}=0.22$
- Fiber Buffer/Tube Diameter: 900 / 250 μm
- Fiber Bend Radius: 37.5mm (min)
- Fiber Termination: SMA905 Connector

GENERAL SPECIFICATIONS

- Storage Case Temperature: $-30^{\circ}\text{C} \sim 70^{\circ}\text{C}$
- Operating Case Temperature: $15^{\circ}\text{C} \sim 55^{\circ}\text{C}$
- Soldering Temp: 260°C (Solder the electrical connections when operating current > 6 A)

HIGH POWER LASER DIODE DRIVER PERFORMANCE -- CCM & CCM1





Offered by
LASER LAB SOURCE

manufactured by **AeroDIODE**

PRODUCT SALES AND SERVICE:

Orders for this product are fulfilled by Laser Lab Source in North America and select international regions. It is manufactured by Aerodiode, Talence, France.

PRODUCT WARRANTY:

This product is sold with a full one year warranty. It is warranted to be free from defects in material and/or workmanship for a period of one year from the date of shipment.



Laser Lab Source, a division of Research Lab Source Inc.
670 S. Ferguson St., Suite 3
Bozeman, MT 59718 USA

Phone: 406-219-1472

www.LaserLabSource.com

AeroDIODE

Rue François Mitterrand Institut d'Optique d'Aquitaine
33400 Talence FRANCE