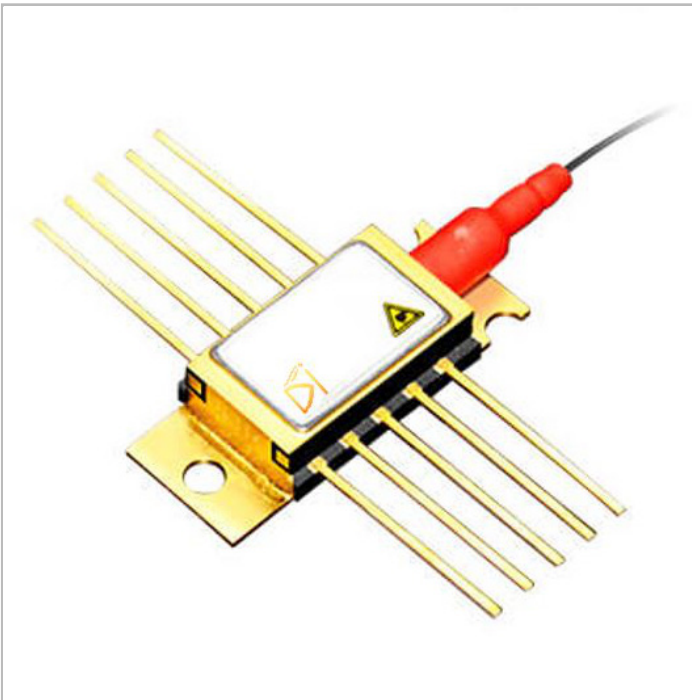




Offered by
LASER LAB SOURCE

manufactured by **AeroDIODE**

1064nm Pulsed Laser Source System, 950mW Output Fiber-Bragg Grating Stabilized, PM Fiber



1064NM PULSED LASER DIODE SOURCE

- o Output Power (Pulsed mode): 950 mW
- o Output Power (CW mode): 500 mW
- o Spectral Width (FWHM): 2 nm (CW)
- o 10-Pin Butterfly Package
- o SM98-PS-U25D-H or Nufern PM980 Fiber

PULSED LASER SOURCE SYSTEM -- 1064LD-3-2-1 / LASER-DIODE / CCS-PULSE

This 1064nm pulsed laser diode source system is built around a 10-pin butterfly laser diode. The pre-configured, pretested precision pulsed source system delivers up to 500mW CW power and 950mW pulsed output power. The laser is mounted in the controller and mounting module, configured for safe operation, and tested to ensure long-running reliable operation.

The CCS-PULSED controller system provides wide-ranging control over the pulse operating parameters, laser drive current, and laser temperature. The source system is easily operated using the included GUI over USB interface, and multiple systems can be operated by the same computer.

1064NM DFB LASER DIODE OPTICAL OUTPUT SPECIFICATIONS

- Adjustable Pulse Width Range: 1 Nanosecond to CW
- Center Wavelength (25°C regulated temperature) : 1064nm (± 2 nm)
- Pulsed Peak Output Power: 950mW
- CW Output Power (typ): 500mW
- Duty Cycle Range: < 5%

CONTROL ELECTRONICS AND MOUNTING MODULE: PULSED AND CW ELECTRONICS SPECIFICATIONS

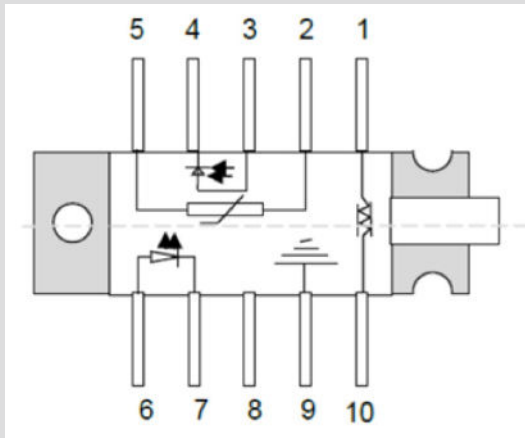
- On-Board Generator Pulse Width Range: 0.5 nanoseconds - 500 nanoseconds
- External Trigger Pulse Width Range: 0.5 nanoseconds - CW
- Internal Pulse Generator Adjustment Precision: 10 picoseconds
- Optical Pulse Jitter: < 25 ps
- On-Board Pulse Generator Repetition Rate Range: 1Hz - 4MHz
- Output Current Pulsed Mode: 0.00 mA - 1.60 Amps
- Output Current CW Mode: 0.00 mA - 500.00 mA
- Output Voltage Maximum: 4.8 Volts
- Current Noise and Ripple (100Hz to 10 MHz): < 0.03% of Full Scale
- Current Set-point Resolution @ 500mA: <0.1 mA
- Current Set-point Resolution @ 1000mA: <0.3 mA



1064NM GRATING STABILIZED BUTTERFLY LASER DIODE

These diode lasers employ a Fabry-Perot cavity laser and fiber Bragg grating to provide a 2nm linewidth up to 650mW CW output power and 2000mW in pulsed mode. The high stability makes them an excellent choice for sensing, spectroscopy, metrology, telecom, and atomic physics research applications.

These laser diodes are offered in an 10-pin butterfly package with a polarization-maintaining fiber pigtail. They have an integrated thermo-electric cooler, an internal 10 kΩ thermistor, and an internal monitor photodiode. The package is electrically floating relative to ground, offering flexibility in mounting and control of the laser.



| Pin | Description | Pin | Description |
|-----|---------------------|-----|-------------------|
| 1 | TEC (+) | 6 | Laser anode (+) |
| 2 | Thermistor | 7 | Laser cathode (-) |
| 3 | Monitor anode (-) | 8 | NC |
| 4 | Monitor cathode (+) | 9 | Package ground |
| 5 | Thermistor | 10 | TEC (-) |



OPTICAL AND ELECTRICAL SPECIFICATIONS

- Wavelength: 1064 nm (\pm 2 nm)
- Pulsed Output Power: 2000 mW
- CW Output Power: 650 mW
- Threshold Current: 30 mA
- Operating Current: 350 mA
- Operating Voltage: 2.0 V

FIBER PIGTAIL

- PM fiber: SM98-PS-U25D-H or Nufern PM980
- Mode Field Diameter: 6 μ m
- Buffer Diameter: 250 μ m
- Fiber Termination: Ferrule



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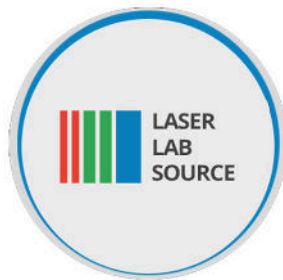
manufactured by **AeroDIODE**

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.



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