



Offered by
LASER LAB SOURCE

manufactured by **AeroDiODE**

1030nm Pretested Laser Diode Source System 700mW Single-Mode Pulsed Output Power / 200mW CW



1030NM PULSED SINGLE-MODE LASER DIODE SOURCE SYSTEM

- o Output Power (Pulsed mode): 700 mW
- o Output Power (CW mode): 200 mW
- o Spectral Width (FWHM): <1 nm
- o 14-Pin Butterfly Package
- o SM98-PS-U25D-H or Nufern PM980 Fiber

PULSED LASER SOURCE SYSTEM -- 1030LD-1-2-1 / LASER-DIODE / CCS-PULSE

This precision pulsed laser diode source system includes a 1030nm single-mode butterfly laser diode in a preconfigured, pretested control and mount system delivering up to 700mW pulse output power from the polarization-maintaining fiber (200mW CW). We take the guesswork out of your 1030nm source requirement and you receive a turn-key system ready to go.

The CCS-pulse laser diode controller and mounting module provides precision control of the drive current and the laser temperature. With comprehensive control over the laser diode, the output power can be controlled, and the wavelength can be controlled by adjusting the laser temperature.

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.

1030NM PULSED LASER DIODE OUTPUT SPECIFICATIONS

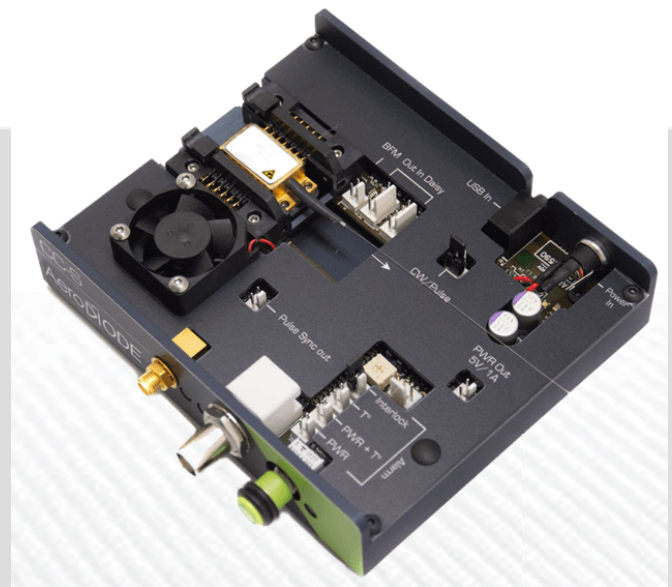
- Adjustable Pulse Width Range: 1 Nanosecond to CW
- Center Wavelength: 1030 nm (-5 / +15 nm)
- Pulsed Peak Output Power: 700mW
- Spectral Width: 0.2 nm (CW) / 1.0 nm (Pulsed)
- Duty Cycle Range: < 5%
- Temperature tuning (20 - 50°C range) : ~0.35 nm / °C

CONTROL ELECTRONICS AND MOUNTING MODULE

- Laser diode chip temperature tuning range : 20 - 50 °C
- TEC Controller Compatible with NTC Thermistors: 1kΩ - 100 kΩ
- Mounting Socket Base Material: Anodized Aluminum
- Mounting Socket Technology²: Zero Insertion Force Socket

USER INTERFACE , DIMENSIONS AND POWER INPUT

- Interface: USB
- OS Compatibility: Windows XP / Windows 7
- Control Software: Control Software - Windows GUI Included
- Input Power Supply: 12 VDC (220V/110V adapter included)
- Module Dimensions: 126.8mm (W) x 130mm (L) x 32.5mm(H)
- Libraries: DLLs - Hexa/Linux - Labview - Python
- Analog Interface (0-3.3V): Peak Power Adjustment



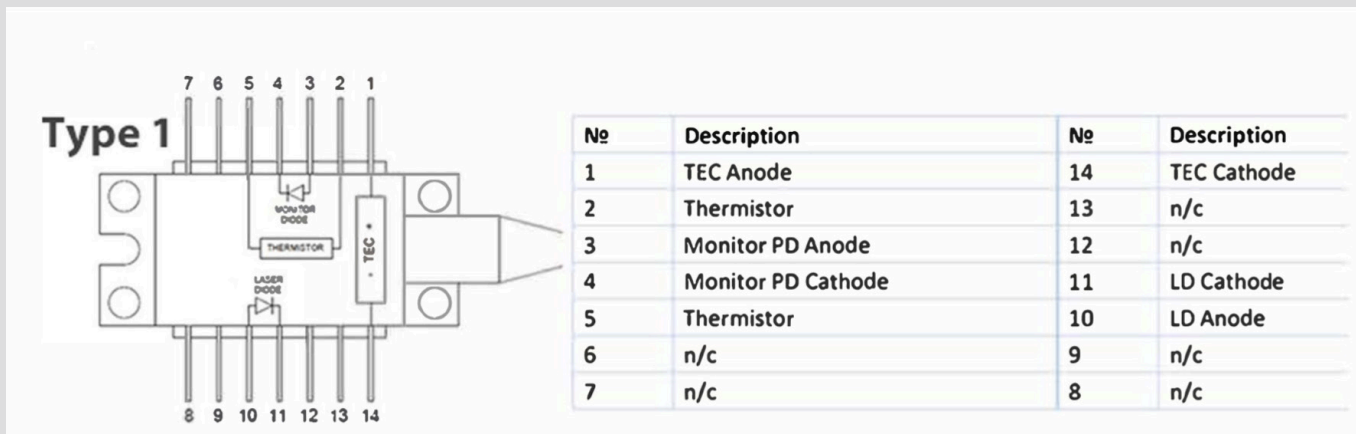
1030NM SINGLE-MODE BUTTERFLY LASER DIODE

These single-mode Fabry-Perot laser diodes offer a narrow emission profile and up to 200mW CW output power and 1200nm in pulsed mode. Their high stability and wavelength tuneability make them an excellent choice for sensing, spectroscopy, metrology, telecom, and research applications.

These laser diodes are offered in an industry standard 14-pin butterfly package with a polarization-maintaining fiber pigtail. They have an integrated thermo-electric cooler, an internal 10 kOhm thermistor, and an internal monitor photodiode. The package is electrically floating relative to ground, offering flexibility in mounting and control of the laser.

ELECTRICALLY FLOATING PACKAGE

TYPE 1 CONFIGURATION





1030NM SINGLE-MODE BUTTERFLY LASER DIODE SPECIFICATIONS

OPTICAL AND ELECTRICAL SPECIFICATIONS

- Wavelength: 1030 nm (-5 / +15 nm)
- Spectral Width: 0.2nm / 1.0nm (CW / Pulse)
- Pulsed Output Power: 1200 mW
- CW Output Power: 200 mW
- Threshold Current: 60 mA
- Operating Current: 350 mA (CW)
- Operating Current: 2500 mA (Pulse)
- Operating Voltage: 1.6 V
- Wavelength Shift w/Temperature: 0.35 nm/mA

FIBER PIGTAIL

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



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