



# 1030nm Pretested Laser Diode Source System 200mW Single-Mode CW Output Power



# 1030NM SINGLE-MODE CW LASER DIODE SOURCE SYSTEM

- o Output Power (CW mode): 200 mW
- o Spectral Width (FWHM): <0.2 nm
- o 14-Pin Butterfly Package
- o SM98-PS-U25D-H or Nufern PM980 Fiber





# CW LASER SOURCE SYSTEM -- 1030LD-1-1-1 / LASER-DIODE / CCS-CW

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

The CCS-CW 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 CW LASER DIODE OPTICAL OUTPUT SPECIFICATIONS

- Center Wavelength: 1030 nm (-5 / +15 nm)
- CW Output Power (typ): 200 mW
- Emission Bandwidth: <0.2 nm

#### **CONTROL ELECTRONICS AND MOUNTING MODULE**

- TEC Current Range: 0.0 1.5 Amps
- TEC Voltage Range: 0.0 4.8 Volts
- TEC Controller Compatible with NTC Thermistors:  $1k\Omega$   $100~k\Omega$
- Mounting Socket Base Material: Anodized Aluminum
- · Mounting Socket: Zero Insertion Force Socket

#### **USER INTERFACE, DIMENSIONS AND POWER INPUT**

- Current Adjustment through Side Panel Control Knob or USB
- · Remote Interface: USB
- 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
- OS Compatibility: Windows XP / Windows 7







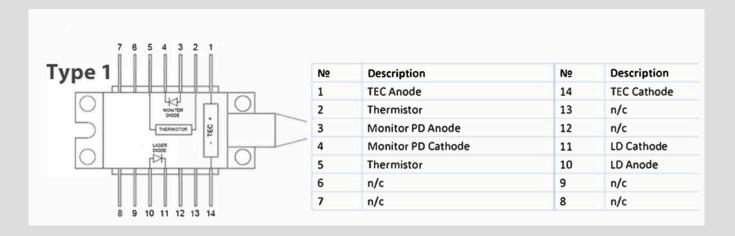
### 1030NM SINGLE-MODE BUTTERFLY LASER DIODE

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 mW

• Operating Current: 350 nm (CW)

• Operating Current: 2500 nm (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





## **PRODUCT SALES AND SERVICE:**

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

## **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.



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