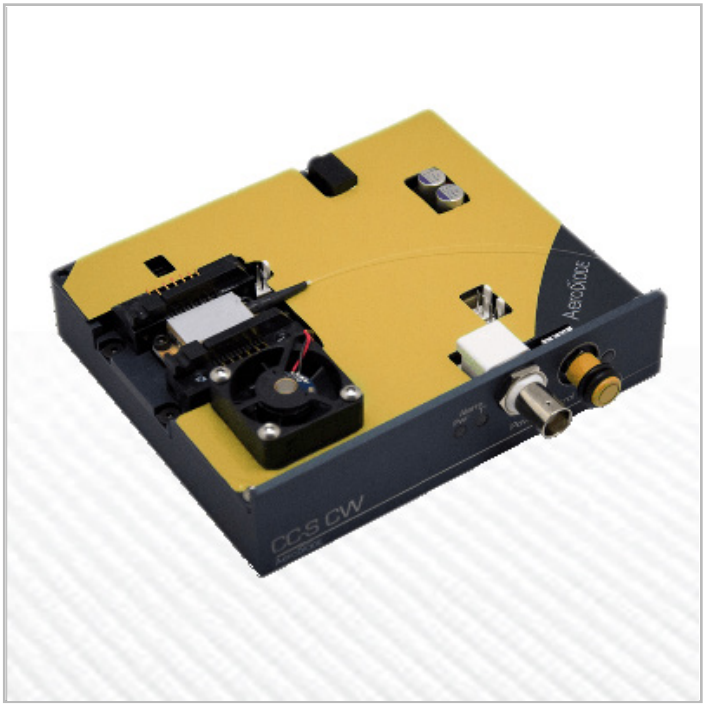
Offered by
LASER LAB SOURCE

manufactured by AeroDIODE

1550nm, 40mW DFB Laser Diode
Pretested and Calibrated CW Source System



1550NM DFB LASER DIODE
TURN-KEY CW SOURCE SYSTEM

- Pretested and Calibrated
- Output Power: 40 mW
- Spectral Width (FWHM): < 200 kHz
- 14-Pin Butterfly Package, Industry Standard Type 1 Pin Cofiguration
- SMF28 Fiber, FC/APC Fiber Connector
- PM1550 Polarization Maintaining Fiber Available

Laser Lab Source
a division of Research Lab Source Corporation

www.LaserLabSource.com
phone: 800-887-5065

670 South Ferguson
Bozeman, MT 59718

1430NM TURN-KEY SOURCE SYSTEM

These CW 1550nm DFB single-frequency laser source & control modules offer the user a pre-configured, calibrated bench top source solution. The integrated 1550 nm laser diode source module is single frequency and single-mode fiber coupled. Both the chip in the butterfly package and the package itself were designed and optimized to provide excellent long term reliability. The coupling of the laser light into the fiber is based on proprietary techniques and manufacturing processes that provide high peak output power.

LASER DIODE CONTROL ELECTRONICS AND BUTTERFLY MOUNTING MODULE

The control electronics and mounting module for these laser diodes delivers high stability bias current, a precision TEC controller and a pre-configured ZIF mounting socket. These control modules offer multiple mechanical, thermal and electronic protection features. They ensure that your laser diode is protected and operated safely.

The on-board TEC controller incorporates a fast feedback PID control loop to provide high temperature set-point stability. A user-set temperature limit keeps the source from thermal damage. Additionally, multiple bias current / voltage protection features are designed to keep the source safe from ESD, power outages, and reverse voltage. A user-controlled current limit clamps the current at the set limit level.

USB AND CONTROL SOFTWARE

The user can set and monitor all of the control parameters of the DFB source laser using the USB input and the supplied GUI software. These units ship with the USB cable to connect your PC to the connector on the side panel. A simple to use single page graphical user interface allows you to control all of the CW parameters as well as set current and temperature limits. Other features of these control modules include a daisy chain output, sync output, alarm monitor and back facet monitor output to monitor the DFB laser's power.

DFB LASER DIODE CW OPTICAL OUTPUT SPECIFICATIONS

- Center Wavelength: 1550 nm (±5 nm)
- CW Output Power (typ): 40 mW
- Emission Bandwidth: < 200 kHz (160 kHz typ)
- Wavelength Temp. Coefficient: 0.08 nm/°C
- Wavelength Shift w/ Current: 0.003 nm/mA
- SMSR: > 35 dB (50 dB typ)

CONTROL ELECTRONICS AND MOUNTING MODULE

- TEC Current Range: 0.0 - 1.5 Amps
- TEC Voltage Range: 0.0 - 3.8 Volts
- TEC Controller Compatible with NTC Thermistors: 1kΩ - 100 kΩ
- 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

LASER DIODE FIBER AND CONNECTOR

- Single Mode SMF28, Fiber Core 9 µm
- SMF Mode Field Diameter: 6 um
- SMF Buffer Diameter: 250 um
- PM1550 Fiber Available Optionally (plus $200)
- FC/APC Connector

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 warrantied 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