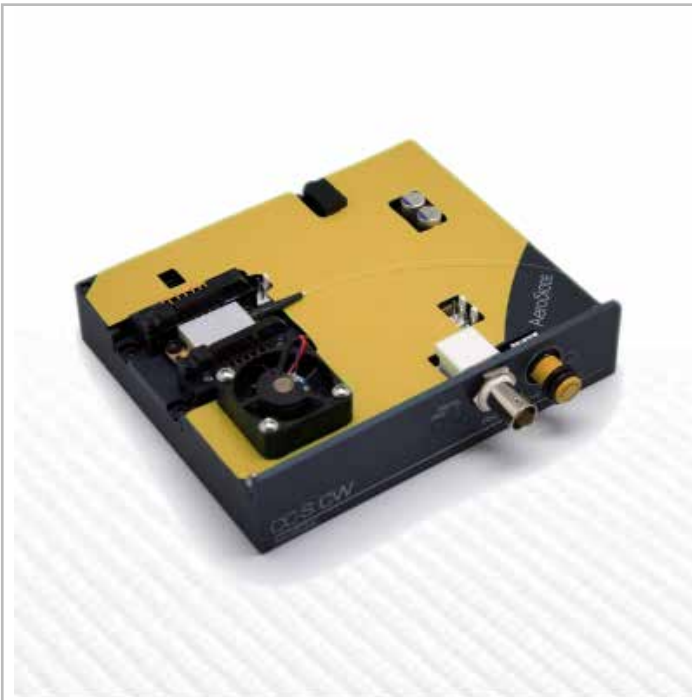




Offered by
LASER LAB SOURCE

manufactured by **AeroDIODE**

940nm Pre-Configured Laser Diode Source 200mW CW Control Electronics and Mount Module



940LD-1-1-1 / LASER-DIODE / CCS-CW

- o Pre-Tested and Calibrated CW Source System
- o CW Output Power 200mW
- o Line Width < 1 nm
- o Single Mode Fiber, FC/APC Fiber Connector
- o Industry-Standard Type-1 Pinout
- o Replaceable Laser Diode
- o Polarization Maintaining Fiber Available



**LASER
DIODE
SOURCES**



940NM PRE-CONFIGURED SOURCE SYSTEM

These CW 940nm single-mode laser source & control modules offer the user a pre-configured, calibrated bench top source solution. The integrated 940 nm laser diode source module is 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 CONTROL SOFTWARE

The user can set and monitor all of the control parameters of the 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





940NM, 200MW, PRE-CONFIGURED DFB LASER DIODE SOURCE

Optical Specifications

Wavelength: 940 nm \pm 5 nm
Wavelength: 940 nm \pm 5 nm
Emission Bandwidth: < 1 nm
Wavelength Shift w/Temperature: 0.3 nm/ $^{\circ}$ C
Wavelength Shift w/Current: 5 nm/A

Optical Specifications with Optional FBG

Center Wavelength: 940 nm \pm 1 nm
Emission Bandwidth: < 0.2 nm
Wavelength Shift w/Temperature: 0.005 nm/ $^{\circ}$ C
Emission Bandwidth: < ~0 nm
SMSR: 20 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: 1k Ω - 100 k Ω
Mounting Socket Base Material: Anodized Aluminum
Mounting Socket: Zero Insertion Force Socket

User Interface, Dimensions, 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 and Fiber Connector

Single Mode HI1060
SMF Mode Field Diameter: 5.9 \pm 0.3 @ 980 nm
PM980 Fiber Available Optionally
FC/APC Connector



Offered by
LASER LAB SOURCE



**LASER
DIODE
SOURCES**

PRODUCT SALES AND SERVICE:

Unlimited phone and email support is provided for products purchased through Laser Lab Source. 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