



INTEGRATED 976NM 10W LASER

multimode pump laser installed
under clamping plate



PRE-CONFIGURED CONTROL SYSTEM

current source + TEC controller & air cooled heat sink

LDX-976NM-10W/AN

976nm, 10W Laser Diode Source and
Pre-Configured Control System

Laser Diode + Current & TEC Controller
+ Integrated Fan-Cooled Heat Sink

Includes 976nm, 10W (CW) Fiber Cou-
pled Laser Diode Pump

Pre-Configured and Pre-Tested Turn-Key
System

105 μ m Fiber Core Diameter, NA 0.22
(No Connector on Fiber Pigtail)

USB/UART Interface with GUI ~ DLLs /
Hexa / Labview / Python

**WORLD LEADING PRODUCTS
FOR LASER SCIENTISTS AND ENGINEERS**



SPECIFICATIONS

INTEGRATED LASER DIODE SPECIFICATIONS

- CW Output Power (min): 10 Watts
- Slope Efficiency (typical): 0.95 W/A
- Electrical-to-Optical Efficiency (min): 48%
- Center wavelength: 976 nm (± 3 nm)
- Spectral width (FWHM) (typical): 5 nm
- Wavelength Shift with Temperature (typical): 0.3nm/C

LASER DIODE ELECTRICAL SPECIFICATIONS (TYPICAL)

- Typical Threshold current I_{th} : 1 Amp
- Typical Operating current I_{op} : 11 Amps
- Operating Voltage: < 2 Volts

LASER DIODE MODULE MECHANICAL & FIBER SPECIFICATIONS

- Buffer diameter: 250 μ m
- Cladding diameter: 125 μ m
- Core diameter: 105 μ m
- Numeric aperture: 0.22
- Fiber length: 1 meters
- Fiber Termination: None (bare fiber)

LASER DIODE CURRENT & TEMPERATURE CONTROLLER

- Adjustable Current : 0.00 -13.00 Amps
- Compliance Voltage Range: up to 23 Volts
- Current Stability < 0.05% full scale
- Modulation Bandwidth: 500kHz
- Laser Temperature Control Range (typ): 15 - 40 °C
- Temperature Control Stability (typ): < 0.05 °C
- Modulation Rise / Fall Time: < 10 μ s
- Modulation Trigger: Internal or External
- Photodiode Power Monitor: Included
- Control Modes: ACC (Automatic Current Control) and APC (Automatic Power Control)

SYSTEM USER INTERFACE AND POWER REQUIREMENTS

- Power Supply Input: 24 V (220/110V power supply not included)
- USB/UART Interface with GUI ~ DLLs / Hexa / Labview / Python

CONTROL UNIT DIMENSIONS

- 238mm x 119mm x 112mm



13A current source with compliance voltage up to 23V

Low thermal resistance peltier cooled mounting plate with adjustable torque top clamp

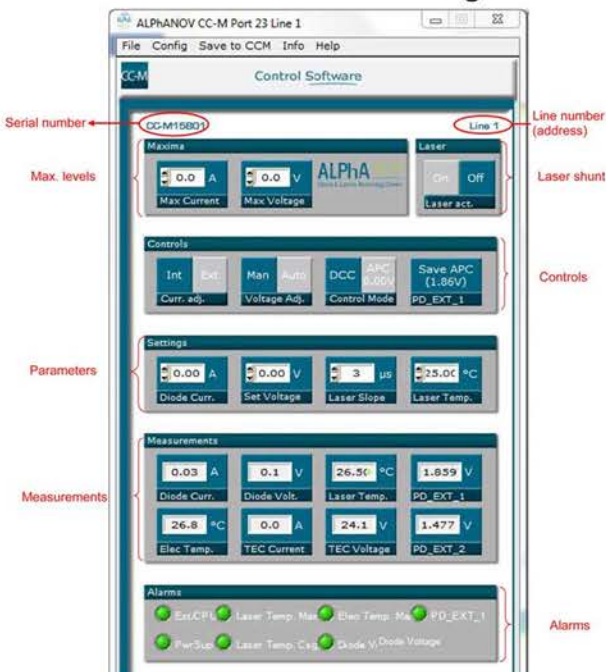


USB / UART interface

fan removes up to 60 watts of laser waste heat

High Power Laser Diode Control and Mounting Unit

GUI Interface via USB for Fast Easy Set-Up, Control and Monitoring



Simple to Use Graphical User Interface for Complete Control of the Laser Diode



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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