



940nm Pre-Configured Fiber-Coupled Laser Diode Source 70W, Multi-Mode Output



940LD-4-4-1 / LASER-DIODE

- o 70 Watt Output Power
- o Spectral Width 6 nm
- o Open-Frame Controller, Replaceable Laser
- o 105μm Core Fiber-Coupled, NA 0.22 SMA905 Terminated
- o USB-Connected Operation









CW LASER SOURCE SYSTEM

This 70 Watt, 940nm, CW source system is built around a highly reliable fiber-coupled laser diode. The system is preconfigured and pretested, and is delivered ready-to-run.

The CCM laser source system features open-case construction: the laser, heat-sink, and controller electronics are contained in an open case to provide access to the laser diode as application requirements evolve.. The source system is easily operated using the included GUI over USB interface, and multiple systems can be operated by the same computer.



940LD-4-4-1 / LASER-DIODE / CCM SPECIFICATIONS

Laser output specifications Wavelength: 940 nm (± 5 nm)

Spectral Width: 6 nm Output Power: 70 W

Optical Fiber: 105µm Core Multimode

Laser Diode Controller Specifications Current Range: 0 - 13 Amps

Compliance Voltage Range: 0 - 23 Volts

Current Stability: ± 0.05%

Laser Diode Set-Point Adjustment Resolution: 0.05 Amps

Max. Modulation Rate: 100 kHz

TEC Controller Temperature Control Range (typ): 15 - 40°C

Temperature Stability (typ): 10 mK

TEC Power: > 150 Watts

Modulation Specifications Pulse Duration: 10 µs to CW (External Source)

Trigger: External Only

Externally Adjustable CW Offset in Pulse Mode

User Interface and Power Input USB with GUI Software

Includes Control Software Libraries: DLLs, Hexa, Labview VI Required Power Supply: 24 VDC (not included; see below) Recommended Power Supply: EA-PS 2042-20B (from Newark)

Dimensions 238 mm x 119 mm x 112 mm





940LD-4-0-0 / LASER-DIODE SPECIFICATIONS

Optical Specifications Wavelength: 940nm (± 5nm)

CW Output Power: 70 Watts Spectral Width (FWHM): 6 nm (typ)

Wavelength shift w Temperature: 0.3 nm/°C Wavelength shift w Current: 0.7 nm/A

Back Reflection Isolation Stage: 1020 - 1200 nm

Back Reflection Isolation: 30 dB

Electrical Specifications Threshold Current: 0.8 A

> Operating Current: 11.5 A* Operating Voltage: 10.5 V Conversion Efficiency: 50%

* For operating currents above 6 Amps, the electrical

connections must be soldered.

Fiber and Package Specifications Fiber Core: 105 µm, NA 0.22

Clad Diameter: 125 µm

Buffer / Tube Diameter: 900 µm Min Bend Radius: 37.5 mm

Connector: SMA 905

Dimensions: 48 mm x 80 mm x 16 mm

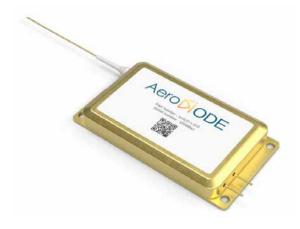
Mounting Hole Dimensions: 3.4mm dia / 75 mm x 40 mm

Storage Temperature: -30°C to 70°C Operating Temperature: 15°C to 55°C Soldering Temperature: 260°C (max)

Soldering Time: 10 sec (max)

DIODE LASER-BASED SOURCE

The CW laser source system is based on a robust and reliable fiber-coupled 940nm laser diode. The laser is designed to provide stable and worry-free output for long operating life times.







PRODUCT SALES AND SERVICE

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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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