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632.8nm, 55mW Free Space Frequency Stabilized Laser Diode

632.8nm Frequency Stabilized Laser Diodes (Free Space and Fiber-Coupled options shown)

Stock **#33-045** **2 In Stock**

- 1 +

C$9,660.00

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Qty 1+	**C$9,660.00** each
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General

Warm-Up Time (minutes):
2.00

Aspect Ratio:
1.5 - 2 (Output Beam)

Type of Laser:
Diode

Laser Class - CDRH:
IIIb

Physical & Mechanical Properties

Dimensions (mm):
71.0 L x 63.5 W x 19.8 H

Weight (g):
135.00

Pointing Stability (µrad):
<50 (8 Hours)

Optical Properties

Polarization:
100:1 Linear

Wavelength (nm):
632.80

Mode Quality, M^2:
1.1 (Horizontal)
1.2 (Vertical)

Wavelength Tolerance (nm):
±0.5

Beam Diameter (mm):
0.8 x 1.6

Spectral Line Width (MHz):
Typical: 10

Beam Stability (nm):
±0.002

Beam Divergence (mrad):
1.3 x 0.8

Color:
Red

Electrical

Output Power (mW):
55

Power Stability (%):
1.00

Power Consumption (W):
Max: 5

Output Power Tolerance (%):
±10

Noise Level:
10 Hz - 100 MHz: 0.2% RMS

Input Current (A):
Max: 2 @ 3.3 V

Hardware & Interface Connectivity

Electrical Leads/ Pin Connections:
10-pin Connectors (cable provided upon request)

Computer Interface:
USB

Output Type:
Free Space

Environmental & Durability Factors

Operating Temperature (°C):
+15 to +40

Operating Humidity:
5 - 95% (non-condensing)

Regulatory Compliance

Certificate of Conformance:
View

Product Details

- Single Longitudinal Mode (SLM) Performance
- ±0.002nm Wavelength Stability
- Very Low Power Consumption

632.8nm Frequency Stabilized Laser Diodes are ideal for typical HeNe laser applications including flow cytometry, interferometry, confocal microscopy, fluorescence excitation, and Raman spectroscopy. Whereas a comparable HeNe laser would be larger, more expensive, and consume more power, the 632.8nm Frequency Stabilized Laser Diodes feature more compact designs, ±0.002nm wavelength stability, and either greater than 60mW power (free-space model) or greater than 20mW power (fiber coupled model). Additionally, these lasers utilize Variable Bragg Gratings (VBG) to lock the 632.8nm wavelength to a 10MHz linewidth.

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