

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 ⊕ **A\$11,040⁰⁰**

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Volume Pricing

Qty 1+	A\$11,040.00 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

71.0 L x 63.5 W x 19.8 H	Dimensions (mm):
135.00	Weight (g):
<50 (8 Hours)	Pointing Stability (μrad):
Optical Properties	
100:1 Linear	Polarization:
632.80	Wavelength (nm):
1.1 (Horizontal) 1.2 (Vertical)	Mode Quality, M²:
±0.5	Wavelength Tolerance (nm):
0.8 x 1.6	Beam Diameter (mm):
Typical: 10	Spectral Line Width (MHz):
±0.002	Beam Stability (nm):
1.3 x 0.8	Beam Divergence (mrad):
Red	Color:
Electrical	
55	Output Power (mW):
1.00	Power Stability (%):
Max 5	Power Consumption (W):
±10	Output Power Tolerance (%):
10 Hz - 100 MHz 0.2% RMS	Noise Level:
Max 2 @ 3.3 V	Input Current (A):
Hardware & Interface Connectivity	
10-pin Connectors (cable provided upon request)	Electrical Leads/ Pin Connections:
USB	Computer Interface:
Free Space	Output Type:
Environmental & Durability Factors	
+15 to +40	Operating Temperature (°C):
5 - 95% (non-condensing)	Operating Humidity:
Regulatory Compliance	
View	Certificate of Conformance:

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.