

## 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 ⊕ **\$9,660<sup>00</sup>**

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### Volume Pricing

Qty 1+	<b>\$9,660.00</b> each
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### Product Downloads



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

## 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.