

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**

₹7,28,532

i Price inclusive of all taxes

ADD TO CART

Volume Pricing

| | |
|------------|-------------------------------|
| Qty 1-5 | ₹7,28,532 each |
| Qty 6+ | ₹6,55,254 each |
| Need More? | Request Quote |

Product Downloads



General

2.00 **Warm-Up Time (minutes):**

1.5 - 2 (Output Beam) **Aspect Ratio:**

Diode **Type of Laser:**

IIIb **Laser Class - CDRH:**

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: |
|----------------------|------------------------------------|

| | |
|---------------|---------------------------|
| United States | Country of Origin: |
|---------------|---------------------------|

| | |
|--|---------------------|
| Edmund Optics India Private Limited 267, Greystone Building, Second Floor, 6th Cross Rd, Binnamangala, Stage 1, Indiranagar, Bengaluru, Karnataka, India 560038 Phone: +91-80-6845 0000 | Imported By: |
|--|---------------------|

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, $\pm 0.002\text{nm}$ 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.
