

# 800 Air-Cooled Argon Laser System

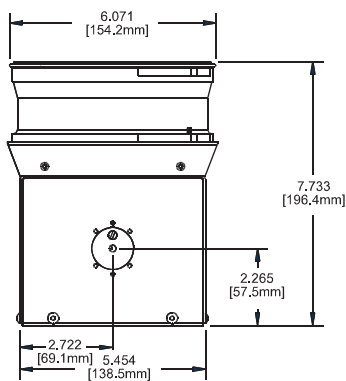
## Features

- Superior Beam Quality
- Low Noise
- Internal Mirror Design
- Extended Lifetime
- Designed for Fiber Optic Delivery
- Exceptional Warranty

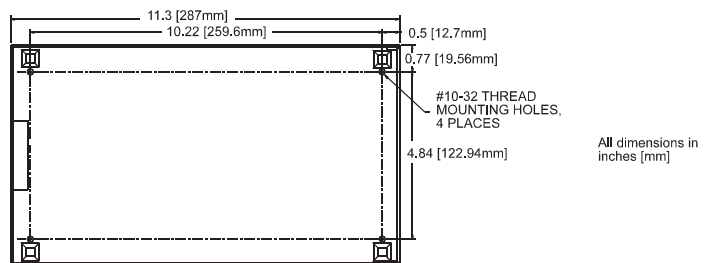
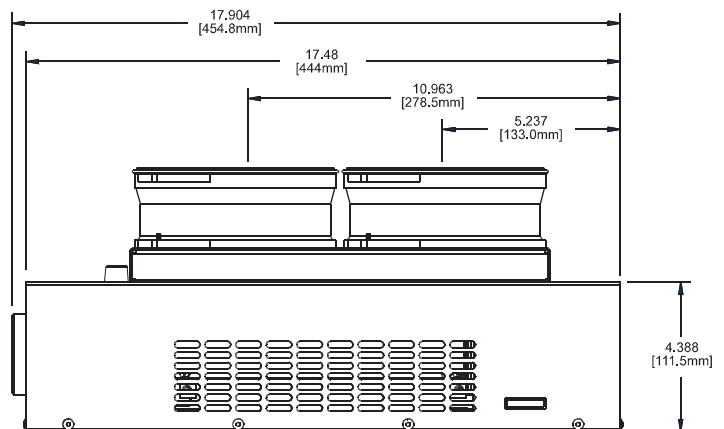
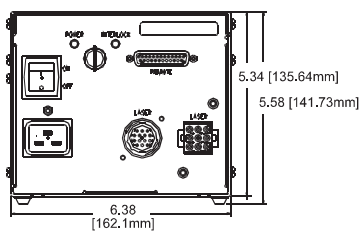
## Design

The 800 argon laser delivers a full 500mW of output power in multiline/multimode configuration as well as high output powers in the single line options. The 800 also offers improved thermal stability, longer life and low electronic and optical noise. The laser incorporates the latest in internal mirror tube technology assuring permanent beam alignment and eliminating contamination. NLC's design permits ease of servicing. The laser is also available with a remote cooling option for applications where fan vibration is a concern.

800 Laser Head



Power Supply



# 800 Specifications

## Applications

- Flow Cytometry
- DNA Sequencing
- Confocal Microscopy
- Spectroscopy
- Hematology
- Optical Disk Mastering
- Lightshows & Displays
- Basic Research

## Product Specifications<sup>1,2,3</sup>

	800BL	800SM	800AL	800AM
Wavelength	488nm	488nm	458-514nm	458-514nm
Output Power	100mW	200mW	225mW	500mW
Power Stability (over 2 hours)	±1%	±1%	±1%	±1%
Spatial Mode	TEM <sub>00</sub>	Multimode	TEM <sub>00</sub>	Multimode
M <sup>2</sup>	≤1.2		≤1.2	
Beam Diameter @ 1/e <sup>2</sup> (mm)	0.83±5%	0.83±5%	0.85±5%	0.85±5%
Beam Divergence (mrad)	<1.0	<2.0	<1.0	<2.0
Polarization Ratio	>250:1	Random	>250:1	Random
Pointing Stability over 2 hours (μrad)	±30/±3°C	±30/±3°C	±30/±3°C	±30/±3°C
Noise (20Hz - 2kHz peak to peak)	0.1%	0.1%	0.1%	0.1%
Noise (20Hz - 20kHz peak to peak)	2.0%	2.0%	2.0%	2.0%
Noise (20Hz - 2MHz rms) <sup>4</sup>	1.0%	1.0%	1.0%	1.0%

## Operating Parameters

Voltage (Universal Input)	200-240VAC±10%
Current	16 Amps Max.
Frequency	47-63 Hz
Phase	Single
Air Intake (Standard / Remote Cooling <sup>5</sup> )	450 / 250 CFM
Air Intake Clearance	3.8cm (1.5in)
Operating Temperature / Humidity	4-40°C (40-105°F) / ≤90%
Storage Temperature / Humidity	-30-60°C (-22-140°F) / ≤100%
Warm-up Period	10 min.

## Dimensions

Laser Head	17.904" x 6.071" x 7.733"
Power Supply	11.3" x 6.38" x 5.58"

## Weights

Laser Head (Standard / Remote Cooling)	19.5 lbs (8.9 kg) / 14.5 (6.6 kg)
Power Supply	7 lbs (3.18 kg)

### Notes

1. Specifications subject to change without notice.
2. When used with LDI 8470 or NLC 2270 power supply.
3. Measurements taken in light control after 5 minute warm-up.

4. 1% for single line wavelengths. 2% for multiline wavelengths.
5. Nominal air flow is 250 CFM. Use Kooltronic Model KBB49 or equivalent fan rated for 425 CFM free air flow and 2.7 inches of water. Hose length not to exceed three meters.

