

800 Air-Cooled Argon Laser System

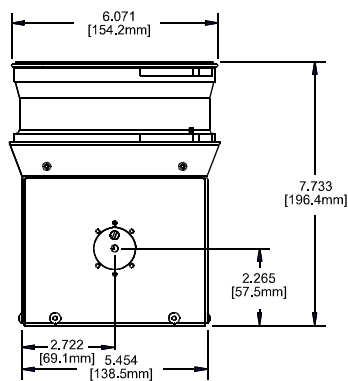
Features

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

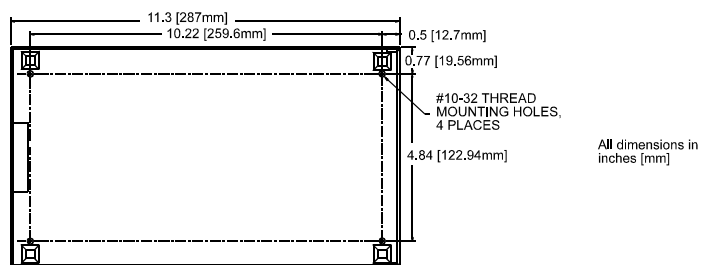
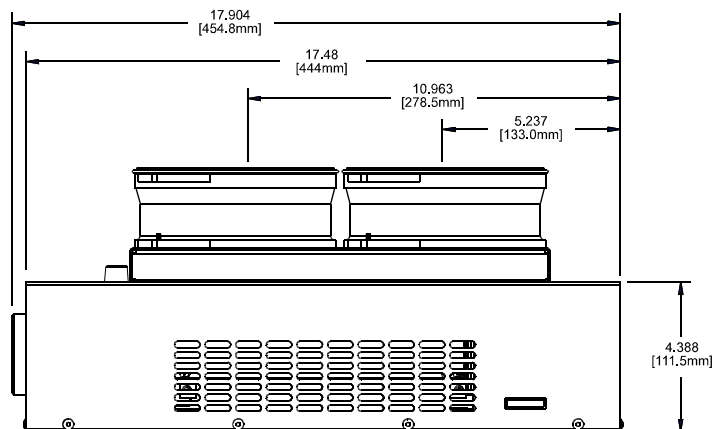
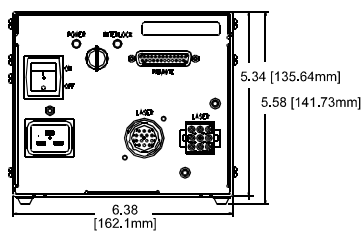
Design

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^{1,2,3}

	800DB	800BL	800AL	800AM
Wavelength	458nm	488nm	458-514nm	458-514nm
Output Power	20mW	100mW	225mW	500mW
Power Stability (over 2 hours)	±1%	±1%	±1%	±1%
Spatial Mode	TEM ₀₀	TEM ₀₀	TEM ₀₀	Multimode
M ²	≤1.2	≤1.2	≤1.2	
Beam Diameter @ 1/e ² (mm)	0.83±5%	0.83±5%	0.85±5%	0.83±5%
Beam Divergence (mrad)	<1.0	<1.0	<1.0	<2.0
Polarization Ratio	>250:1	>250:1	>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) ⁴	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 ⁵)	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 8400 series 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.

