

# C61 Air-Cooled Argon Laser System

## Features

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

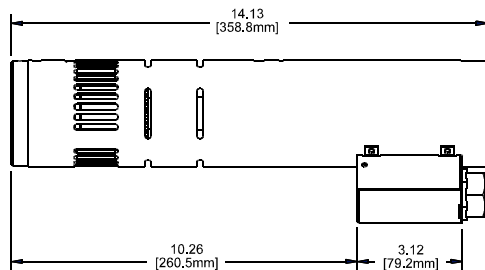
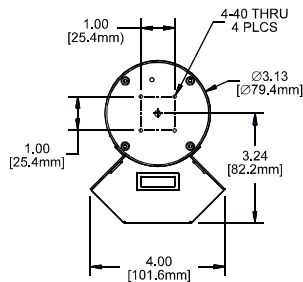
## Cylindrical Design

The C61 argon laser has been engineered to meet today's most demanding OEM applications. Designed in an industry standard cylindrical package, the C61 minimizes vibration by utilizing remote cooling. The laser head was designed for quick field replacement and has been designed by NLC to offer tube replacement as well.

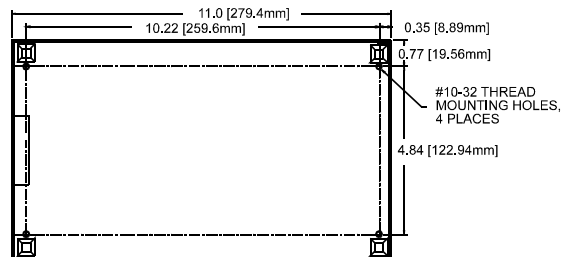
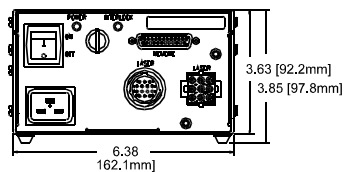
## Beam Quality

The C61 provides unparalleled beam quality that is constant across output power levels and through fiber delivery systems. The laser incorporates the latest in internal mirror tube technology securing permanent beam alignment and eliminating contamination. The C61 also offers improved beam pointing stability, and low noise.

### C61 Laser Head



### Power Supply



All dimensions in inches [mm]



# C61 Specifications

## Applications

- Photo Finishing
- Graphic Arts
- Flow Cytometry
- DNA Sequencing
- Confocal Microscopy
- Spectroscopy
- Hematology
- Semiconductor Inspection
- Medical Detection Equipment
- Basic Research

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

	<b>C61DB</b>	<b>C61BL</b>	<b>C61GL</b>	<b>C61AL</b>
Wavelength	458nm	488nm	514nm	458-514nm
Output Power	5mW	4,10,20,30mW	10,15mW	25,40,65mW
Power Stability (over 2 hours)	±1%	±1%	±1%	±1%
Spatial Mode	TEM <sub>00</sub>	TEM <sub>00</sub>	TEM <sub>00</sub>	TEM <sub>00</sub>
M <sup>2</sup>	≤1.2	≤1.2	≤1.2	≤1.2
Beam Diameter @ 1/e <sup>2</sup> (mm)	0.62±5%	0.65±5%	0.67±5%	0.67±5%
Beam Divergence (mrad)	<1.0	<1.0	<1.0	<1.0
Polarization Ratio	>250:1	>250:1	>250:1	>250:1
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)	1.0%	1.0%	1.0%	1.0%
Noise (20Hz - 2MHz rms)	1.0%	1.0%	1.0%	1.0%

## Operating Parameters

Voltage (Universal Input)	100-240VAC±10%
Current	16 Amps Max.
Frequency	47-63 Hz
Phase	Single
Air Intake	65 CFM <sup>4</sup>
Air Intake Clearance	2.5cm (1in)
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	14.13" x 4" x 4.81"
Power Supply	11" x 6.38" x 3.85"

## Weights

Laser Head	6.5 lbs (2.8 kg)
Power Supply	7 lbs (3.18 kg)

### Notes

1. Specifications subject to change without notice.
2. When used with 9400 series power supply.
3. Measurements taken in light control after 5 minute warm-up.

4. Nominal air flow is 65 CFM. Use McLean Engineering Model INB412 or equivalent fan rated for 185 CFM free air flow and 1.8 inches of water. Hose length not to exceed two meters.

