



## N61 ARGON LASER

The N61 argon laser is an excellent replacement laser head. Designed in a traditional rectangular package, the N61 provides excellent beam quality and long laser life. The N61 also offers improved thermal stability, and low electronic and optical noise. The laser incorporates the latest in internal mirror tube technology securing permanent beam alignment and eliminating contamination. NLC's design permits ease of servicing and simple, drop-in laser tube replacement.

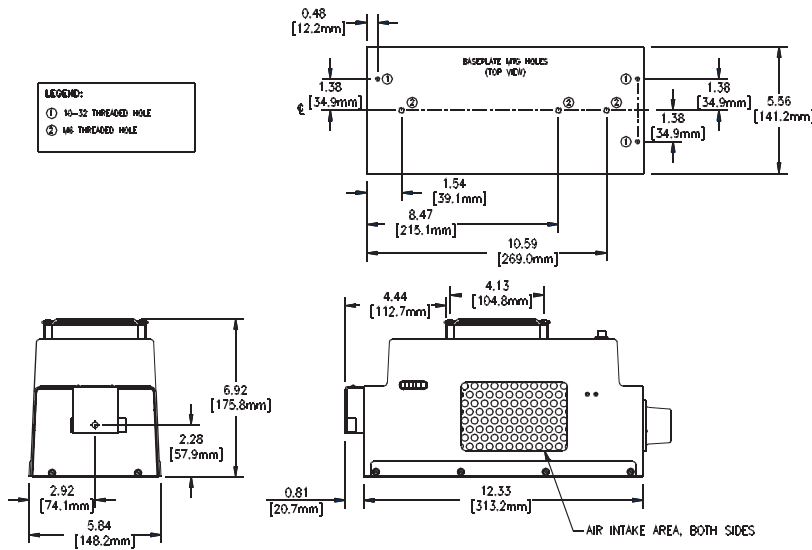
### Features

- Superior Beam Quality
- Low Optical and Electronic Noise
- Internal Mirror Design
- Extended Lifetime
- Drop-in Tube Replacement
- Exceptional Warranty

### Applications

- Pre-Press Color Separations & Scanning
- High Speed Laser Printing
- Photo Plotters for PCB manufacturing
- Graphic Arts
- Flow Cytometry
- DNA Sequencing
- Confocal Microscopy
- Spectroscopy
- Hematology
- Medical Detection Equipment
- Basic Research

# NLC N61 ARGON LASER SPECIFICATIONS



Optical Specifications <sup>1,3,4</sup>	458nm	488nm	514nm	458-514nm
<b>Output Power</b>	3mW	10, 15mW	10mW	25mW
<b>Operating Current<sup>2</sup></b>	<7A	<7A	<7A	<7A
<b>Spatial Mode</b>	TEM <sub>00</sub> , M <sup>2</sup> ≤1.2	TEM <sub>00</sub> , M <sup>2</sup> ≤1.2	TEM <sub>00</sub> , M <sup>2</sup> ≤1.2	TEM <sub>00</sub> , M <sup>2</sup> ≤1.2
<b>Beam Diameter (mm)</b>	0.63±5%	0.65±5%	0.67±5%	0.67±5%
<b>Beam Divergence (mrad)</b>	<1.0	<1.0	<1.0	<1.0
<b>Polarization Ratio</b>	>250:1	>250:1	>250:1	>250:1
<b>Beam Pointing Stability over 2 hours</b>	±30 μrad/±3°C	±30 μrad/±3°C	±30 μrad/±3°C	±30 μrad/±3°C
<b>Power Stability over 2 hours</b>	±1%	±1%	±1%	±1%
<b>Beam Position</b>	±1.0 mm	±1.0 mm	±1.0 mm	±1.0 mm
<b>Beam Angle</b>	≤5.0 mrad	≤5.0 mrad	≤5.0 mrad	≤5.0 mrad

Noise Specifications <sup>1,3,4</sup>	
<b>Noise @ 20Hz - 2kHz (p-p)</b>	0.2%
<b>@ 20Hz - 20kHz (p-p)</b>	2.0%
<b>@ 20Hz - 2MHz (rms)</b>	1.0%

Power Requirements <sup>1,3</sup>	
<b>Voltage (Univ. Input)</b>	100-240 VAC±10%
<b>Current</b>	16 Amps Max.
<b>Frequency</b>	47-63 Hz
<b>Phase</b>	Single

Environmental Specifications <sup>1</sup>	
<b>Temperature</b> Operating Non-Operating	4-40°C (40-105°F) -30-60°C (-22-140°F)
<b>Humidity (no condensation)</b> Operating Non-Operating	0 to 90% 0 to 100%
<b>Altitude</b>	0-3000m (0-9,800ft)
<b>Shock (11msec)</b>	25g
<b>Laser Head Weight (std, lrg fan)</b>	11.1, 12.4 lbs (5.03, 5.62 kg)
<b>Air Intake</b> Standard fan configuration Large fan configuration	106 CFM 225 CFM
<b>Air Intake Clearance</b>	2.5cm (1in)

## Warranty

The laser head is warranted to be free from defects in materials or workmanship for a period of twelve (12) months from the date of shipment or five thousand (5,000) hours of operation at or below standard operating specifications, whichever first occurs.

## Notes

- Specifications subject to change without notice.
- Nominal operating current at beginning of life.
- When used with 9400 series power supply.
- Measurements taken in light control after 5 minute warm-up.

