

Self-Contained Helium-Neon Laser Systems

1500 Series



The Model 1507 and 1508 Novette™ helium-neon laser systems incorporate hard-sealed internal-mirror 1007 and 1008 plasma tubes and power modules into convenient, compact, self-contained packages. These low-cost units demonstrate superior power stability and meet CDRH requirements.

The base of the Novette is slotted for easy mounting. A threaded 5/8"-32 bezel at the beam aperture interfaces with optical accessories. An optional adapter provides a 1"-32 threaded bezel (part number 01-0396).

Key Features

- Hard-sealed internal mirror plasma tube
- Convenient, compact, self-contained packages
- Excellent power stability
- CDRH compliant
- Long operating life

Applications

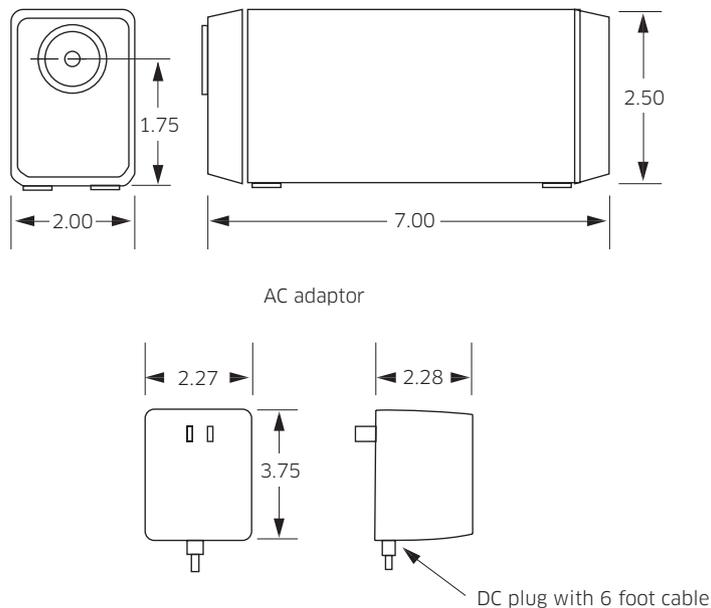
- Alignment
- Metrology
- Inspection

Compliance

- UL certified to UL 61010-1 and CAN/CSA C22.2 No. 61010-1
- IEC/EN 61010-1
- IEC/EN 60825-1
- CDRH 21 CFR 1040.10
- EN 61326-1

1500 Series Novette Laser Systems

(Specifications in inches unless otherwise noted).



Specifications

Parameter	1507	1507P	1508	1508P	Unit
Optical					
Minimum output power (TEM ₀₀)	0.8	0.8	0.5	0.5	mW
Wavelength	632.8	632.8	632.8	632.8	nm
Beam diameter (1/e ² points, ±3%, TEM ₀₀)	0.48	0.48	0.48	0.48	mm
Beam divergence (±3%, TEM ₀₀)	1.7	1.7	1.7	1.7	mrاد
Polarization ratio (minimum)	N/A	500:1	N/A	500:1	—
Longitudinal mode spacing (nominal)	1090	1090	1090	1090	MHz
Maximum noise (rms, 30 Hz to 10 MHz)	1.0	1.0	1.0	1.0	%
Maximum drift (mean power measured over 8 hours)	±2.5	±2.5	±2.5	±2.5	%
Maximum mode sweep contribution	10	10	20	20	%
Maximum warm-up time (minutes to 95% power)	10	10	10	10	min.
CDRH class/IEC class	IIIa/3R	IIIa/3R	II/2M	II/2M	—
Electrical					
AC adaptor operating current	400 mA (max.)				
General					
Mode purity	>95%				
Head weight	1.1 lbs.				
Environmental					
Altitude	0 to 6,560 feet (operating), 0 to 70,000 feet (non-operating)				
Temperature	-40 to 70°C (operating), -40 to 150°C (non-operating)				
Humidity	non-condensing				
Shock	25 g for 11 ms, 100 g for 1 ms				
Input line voltage					
For 1500 series Novette lasers, specify the desired AC adaptor* input voltage by adding the appropriate dash number to the model number when ordering.	-1 for 120 V AC, -2 for 220 V AC, -3 for 100 V AC All model 1507/1508 laser heads will function with each listed AC adaptor.				

* For lost or damaged AC adaptors -1, -2, or -3, simply order replacement part numbers 21056997, 21056998, or 21056997, respectively.

Ordering information

For more information on this or other products and their availability, please contact your local Lumentum account manager or Lumentum directly at customer.service@lumentum.com.

Warranty

Lumentum helium-neon laser systems are warranted to be free of defects in workmanship and materials for 12 months from the date of shipment.

Regulatory compliance

The products listed in this data sheet comply to one or more of the following regulatory standards, and may display one or more of the safety labels shown below. Contact your local Lumentum sales representative for additional information on specific products or configurations.



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Toll Free: 844 810 LITE (5483)

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