20 mW 632.8nm (RED) HELIUM NEON LASER SYSTEM
MODEL: N-LHP-845

Laser Output Specifications

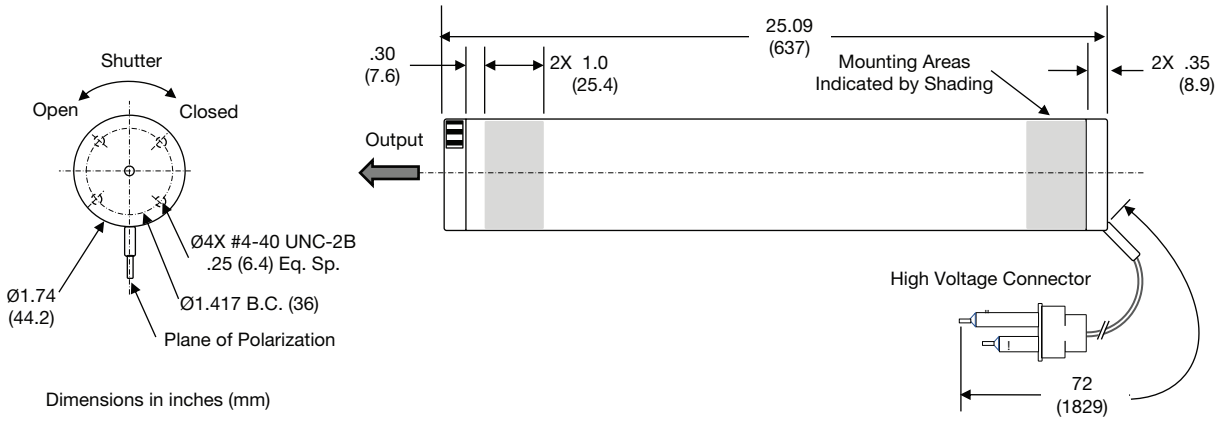
Minimum CW Power Output (mW)	20.0
Wavelength (nm)	632.8
Transverse Mode	> 90% TEM00
Polarization	Linear >500:1
Beam Diameter at 1/e2 Points (mm)	0.96 ± 5%
Beam Divergence (mrad)	.86 ± 5%
Longitudinal Mode Spacing (MHz)	257
Mode Sweeping	< 1%
Long Term Power Drift (8 hrs)	< 5%
Amplitude Noise, 30 Hz to 30 MHz (RMS)	< 2%
Warmup to > 95% of Maximum Power (minutes)	< 15
Beam Concentricity with Respect to Housing (mm)	± 0.25
Beam Parallelism with Respect to Housing (mrad)	< 1

Laser Electrical Specifications

Start Voltage (kVdc)	< 10
Recommended Operating Current (mA)	7.0 ± 0.2
Operating Voltage (VDC)	3900 ± 100

System Environmental Specifications	Operatiing	Non-Operating
Temperature (°C)	-20 to +40	-40 to +80
Altitude (meters)	0 to 3000	0 to ∞
Relative Humidity (%, non-condensing)	0 to 99%	0 to 99%
Mechanical Shock (g)	< 1 for < 11 msec	< 25 for < 11 msec < 100 for < 1 msec

Laser Dimensions



20 mW 632.8nm (RED) HELIUM NEON LASER SYSTEM
MODEL: N-LHP-845

Power Supply Input Specifications

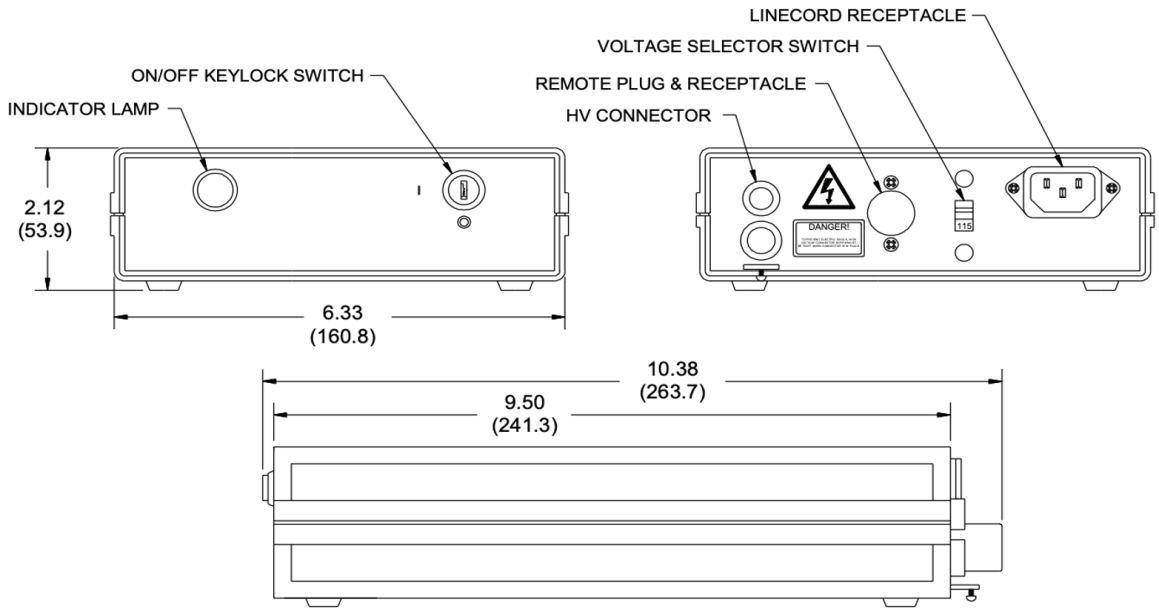
Voltage (VAC)*	115 / 230
Line Frequency (Hz)	50 to 400
Current (A)	0.6 / 0.3

Power Supply Output Specifications

Sustaining Voltage (VDC)	3200 to 4000
Start Voltage (kVDC)	> 11
Current Setting (mA)	7.0 ± 0.2
Power (W)	< 29
Current Ripple (% Peak to Peak)	< 2.0
Current Ripple (% RMS)	< 0.71
Time Delay (Seconds)	3 to 7

*Please specify AC power cord plug type: NEMA 5-15P for 100 to 120 VAC, Europlug (CEE7/4) for 230 VAC, or British Standard (BS 1363) for 230 to 240 VAC.

Power Supply Dimensions



Dimensions in Inches (mm)

Reference Dimensions Only

+1.949.863-3144 1791 Deere Avenue, Irvine, CA www.newport.com

20 mW 632.8nm (RED) HELIUM NEON LASER SYSTEM
MODEL: N-LHP-845

Laser Classification

US 21 CFR 1040.10	Compliant [See Conditions of Acceptability Below]	Class IIIb
IEC 60825-1:2014	Compliant [See Conditions of Acceptability Below]	Class 3B
US FDA Accession Number		8010237

Regulatory Compliance

Laser Safety	IEC 60825-1:2014
Electrical Safety	IEC 61010-1:2010 + A1
Certifying Body	TUV Rheinland
RoHS 3	EU 2015/863
Product Markings	cTUVus, CE, WEEE, UKCA

Export Information	Laser	Power Supply
ECCN	EAR99	EAR99
HTTS	9013.20.0000	8504.40.9510
Country of Origin	USA	USA

THESE PRODUCTS ARE SOLD IN ACCORDANCE WITH UNITED STATES EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAWS IS PROHIBITED.

CONDITIONS OF ACCEPTABILITY :

1. For component type devices, the following requirements shall be followed at end use.
2. The laser power supply at end use shall have negative output terminal reliably connected to earth. The maximum output current of the power supply shall not exceed 2.5A under normal and fault conditions.
3. Safety interlock switch, key switch, controls, laser housing and laser beam attenuator, as appropriate for each laser Class, must be present in accordance with Laser safety standards, IEC/EN 60825-1:2014.
4. A visual or audio indicator, in accordance to Laser safety standards, shall be provided in the end product.
5. The unit's thermal circuitry shall be evaluated in the end product.
6. The end user must provide their own safety monitoring mechanism to shut down a power supply if it fails to start the laser after several seconds.
7. IEC/EN 60825-12 shall be considered if the end system is a free space optical communication system used for transmission of information.

Information contained herein is for reference only and subject to change without notice.

DS-082303 N-LHP-845 (09/01/23)

Made in the U.S.A

+1.949.863-3144 1791 Deere Avenue, Irvine, CA www.newport.com