

5 mW 632.8nm (RED) HELIUM NEON LASER MODEL: 05-LHR-151

OUTPUT SPECIFICATIONS

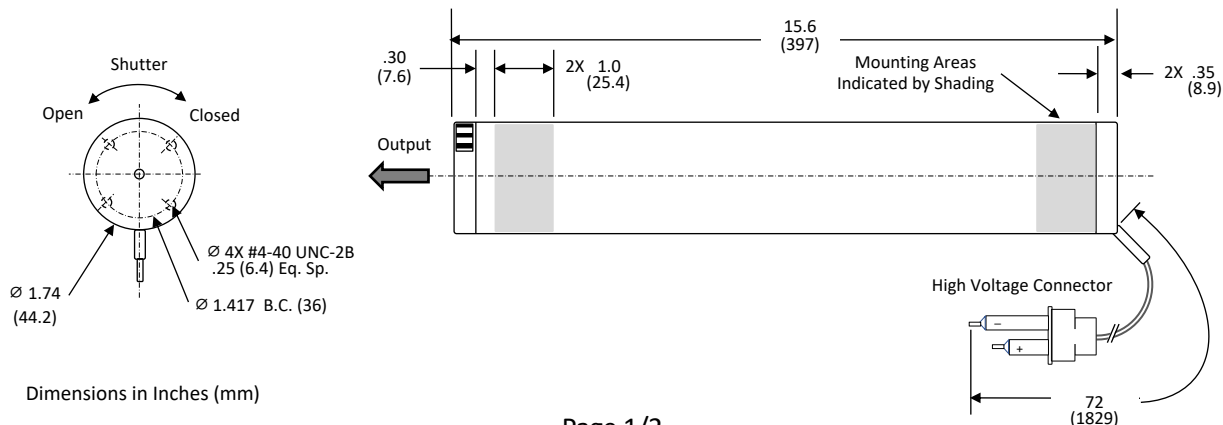
| | |
|---|-------------------------|
| Minimum CW Power Output (mW) | 4.0 |
| Wavelength (nm) | 632.8 |
| Transverse Mode | > 90% TEM ₀₀ |
| Polarization | Random |
| Beam Diameter at 1/e ² Points (mm) | 0.80 ± 5% |
| Beam Divergence (mrad) | 1.00 ± 5% |
| Longitudinal Mode Spacing (MHz) | 438 |
| Mode Sweeping | < 2% |
| Long Term Power Drift (8 hrs) | < 5% |
| Amplitude Noise, 30 Hz to 30 MHz (peak-to-peak) | < 2.8% |
| 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 |

ELECTRICAL SPECIFICATIONS

| | | | |
|------------------------------------|----------------|----------------|----------------|
| Start Voltage (kVdc) | < 10 | | |
| Recommended Operating Current (mA) | 6.5 ± 0.2 | | |
| Operating Voltage (VDC) | 2310 ± 100 | | |
| Recommended Power Supply | Laboratory | OEM (AC) | OEM (DC) |
| | 06-LPL-902-065 | 06-LPM-902-065 | 06-LPM-824-065 |

ENVIRONMENTAL SPECIFICATIONS

| | OPERATING | 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 |

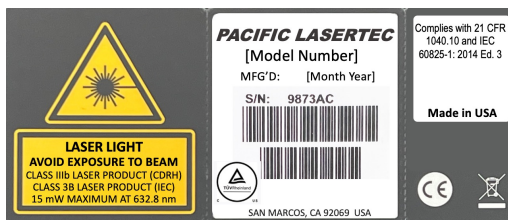


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| LASER CLASSIFICATION | | |
|------------------------------|---|------------------------|
| US 21 CFR 1040.10 | Compliant [See Conditions of Acceptability Below] | Class IIIb |
| IEC 60825-1:2014 | Compliant [See Conditions of Acceptability Below] | 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, UKCA, WEEE |
| EXPORT INFORMATION | LASER | POWER SUPPLY* |
| ECCN | EAR99 | EAR99 |
| HTTS | 9013.20.0000 | 8504.40.9510 |
| Country of Origin | United States | Contact Factory |

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

* Power Supply is Sold Separately



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.