

PRODUCT TYPES

OEM HeNe Laser Tubes –The world’s broadest range.

Laser Heads - Power levels from 0.5 to 17 mW in laboratory and OEM configurations.

High Power Red – Ranging from 20 to 35 mW minimum power.

Green and Yellow - 543nm green and 594nm yellow output wavelengths.

Frequency Stabilized – Turnkey intensity & frequency stabilized systems.

Specialty Lasers - Single and double Brewster window terminated laser tubes.

Power Supplies – Laboratory Units with AC input and OEM models with AC or DC input.

WHY HELIUM NEON?

Narrow Spectral Linewidth – < 1.6 GHz, or approx. 2 pm for standard models, and with active stabilization, < 1 MHz, or better than 0.001 pm.

Long Coherence Length –Coherence lengths ranging from a minimum of 20 cm, up to several hundred meters.

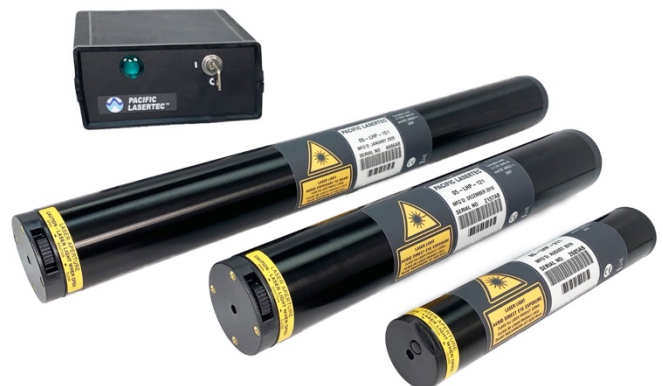
Unmatched Beam Parameters – Low-noise, circular and astigmatism-free beams with typical M^2 values of 1.05 or better.

Long Operational Lifetime – Depending on the model, operating lifetimes can exceed 40,000 hours or more.

Robust Construction – Typical operating temperature range of -20 to +60 °C; without thermoelectric coolers or fans.

KEY APPLICATIONS

- ✓ FTIR / RAMAN
- ✓ INTERFEROMETRY
- ✓ WAFER INSPECTION
- ✓ FREQUENCY REFERENCES
- ✓ HEMATOLOGY / CYTOMETRY
- ✓ SPECTROMETRY & MICROSCOPY
- ✓ EDUCATIONAL SYSTEMS
- ✓ HOLOGRAPHY



LABORATORY & OEM LASER HEADS

Model	Min Power (mW)	Beam Dia (1/e ²) (mm)	Beam Divergence (mrad)	Mode Spacing (MHz)	Voltage (VDC)	Current (mA)	Dia x Length (mm)	Notes
05-LG(x)-193	1.0	0.86	0.81	321	2700	6.5	44.5 x 510	543 nm
05-LH(x)-213	0.5	0.46	1.77	1063	1320	4.0	31.8 x 178	< 1mW, Class 2
05-LH(x)-211	0.9	0.46	1.77	1063	1320	4.0	31.8 x 178	
05-LH(x)-111	1.0	0.59	1.35	687	1790	6.5	44.2 x 272	
05-LHP-121	2.0	0.59	1.35	687	1790	6.5	44.2 x 272	
05-LH(x)-151	5.0	0.80	1.00	438	2290	6.5	44.2 x 396	
05-LH(x)-991	10	0.65	1.24	341	2640	6.5	44.2 x 484	
05-LH(x)-925	17	0.96	0.84	257	3900	7.0	44.2 x 637	
05-LHP-847	20	0.70	1.16	257	3870	7.0	44.2 x 637	
05-LHP-828	25	1.23	0.66	165	5100	8.0	79 x 1023	Rect. Package
05-LHP-928	35	1.23	0.66	165	5100	8.0	79 x 1023	Rect. Package
05-STP-910	0.5	0.48	1.70	--	1220	4.0	Contact Factory	Single Freq., Stabilized
05-STP-912	1.0	0.54	1.50	--	1600	4.0	Contact Factory	Single Freq., Stabilized

Reference specifications only, subject to change without notice.

(x) Designates polarization option. Insert R for Random Polarization, P for Linear Polarization

Power Supplies are sold separately

Specifications Common to all Laser Heads

Static Alignment: ± 0.25 mm and < 1.0 mrad

Angular Drift: < 0.03 mrad after 15 min

Amplitude Noise: < 2% peak-to-peak



High Power Laser Heads



OEM & Laboratory Laser Heads

OEM LASER PLASMA TUBES



Model	Min Power (mW)	Beam Dia (1/e ²) (mm)	Beam Divergence (mrad)	Mode Spacing (MHz)	Voltage (VDC) ⁽¹⁾	Current (mA)	Dia x Length (mm)	Notes
3121H-P	1.0	0.64	1.3	685	1350	6.5	37 x 229	HAC Config.
05-LHB-290	--	--	--	--	1460	6.5	38 x 228	Double B-tube
05-LHP-100	1.0	0.67	1.18	638	1050	3.7	28.5 x 243	Anode Output
05-LH(x)-150	5.0	0.80	1.0	438	1850	6.5	38 x 353	
05-LHP-490	0.9	0.65	1.24	862	1000	4.0	28.5 x 183	
05-LHR-092	3.0	0.63	1.4	641	1514	4.5	28.5 x 243	NMF ⁽²⁾
05-LH(x)-900	1.0	0.53	1.51	883	1100	4.5	28.5 x 178	
05-LHZ-004 ⁽³⁾	0.5	0.49	1.81	1248	1200	3.5	25.4 x 129	Zeeman Split
05-LHR-219	2.0	0.59	1.35	687	1348	6.5	38 x 226	NMF ⁽²⁾

Reference specifications only, subject to change without notice.

- (1) Operating voltage not including ballast resistor. Ballast resistor sold separately.
 - (2) Designates non-mode-flip – contact factory for more information
 - (3) Contact factory for full specifications and split frequencies available
 - (x) Designates polarization option. Insert R for Random Polarization, P for Linear Polarization
- AC and DC input power supply modules are sold separately

Specifications Common to All Laser Heads & Plasma Tubes

Operating Temperature:	-20 to +60°C
Altitude	0 to 3000 meters
Relative Humidity	0 to 99%, non-condensing
Shock	< 1g for < 11 msec

Safety Information, OEM Products: It is the responsibility of the user to comply with all safety requirements as applicable to the product in question, including attaining an accession number, labeling, safety interlocks, submitting a product report and filing annual reports as may be required by regulatory agencies.



Plasma Tubes



OEM & Laboratory Power Supplies



Please contact us for further information