He-Ne LASERS (632.8 nm)

The Helium-Neon-lasers are designed for multi-purpose application, such as confocal laser scanning microscopy, spectroscopy, digital imaging, metrology, industrial measurements, positioning, alignment, aiming, testing, bar code scanning, medicine, science, education, entertainment, and so on. Customized solutions for specific application are optional.

Helium-Neon-laser tubes and modules are of robust mechanical design, excellent beam quality, long life up to 20,000 hours and optimum customer efficiency, with warranty up to 24 months for all standard types.

SPECIFICATION

Wavelength	633nm >95%
Mode Purity	TEM_{00} (Excluded AH050M & AH100M)
Max. Drift (mean power over 8 hrs)	± 5%
Max. Warm-Up Time (95% power)	15 minute

Model	Min Output (TEM_{00})	Beam Diameter ($1/e^2$)	Beam Divergence (TEM_{00},)	Minimum Polarization Ratio	Longitudinal Mode Spacing (nomina)	Noies .rms	Dimension Φ x L(mm)
AH005P	0.5mW	0.49mm	1.75mrad	200:1	1085 MHz	1.0%	35 x 170
AH006R	0.6mW	0.49mm	1.7mrad	Random	1085 MHz	1.0%	35 x 170
AH010R	1mW	0.49mm	1.7mrad	Random	1085 MHz	1.0%	35 x 170
AH020R	2mW	0.75mm	1.2mrad	Random	614 MHz	1.0%	35 x 280
AH020P	2mW	0.75mm	1.2mrad	500:1	614 MHz	1.0%	35 x 280
AH050R	5mW	0.80mm	1.1mrad	Random	438 MHz	1.0%	45 x 400
AH050P	5mW	0.80mm	1.1mrad	500:1	438 MHz	1.0%	45 x 400
AH050M[1]	5mW	1.40mm	4.5mrad	Random	614 MHz	0.5%	35 x 280
AH100R	10mW	0.70mm	1.4mrad	Random	320 MHz	0.5%	45 x 505
AH100P	10mW	0.70mm	1.4mrad	500:1	320 MHz	1.0%	45 x 505
AH100M[1]	10mW	1.50mm	4.0mrad	Random	438 MHz	1.0%	45 x 400
AH150R	15mW	1.00mm	1.0mrad	Random	257 MHz	1.0%	45 x 637

NOTE1: Multi Mode.

High Power He-Ne Lasers

High Power He-Ne lasers are ideal for applications requiring high speed scanning superior signal to noise ratio and high visibility beams over long distances. Bezel accessory is required for use with any of our laser accessories. All lasers are tested to meet demanding lifetime, performance, and quality standards along with CDRH and IEC laser safety requirements. Laser housings are rugged aluminum, with a mechanical shutter at the output end. The single mode outputs of all laser offer high signal/noise ratios and consistent Gaussian beams, which are highly efficient for coupling into delivery systems. Polarization versions are for phase and orientation sensitive applications. Power supplies have key locks, on/off indicator, 3.5 to 7 second time delay, and remote interlocks. All power supplies are included.

SPECIFICATION

Wavelength	633nm
Mode Purity	>95% and >90%(AH350P), TEM_{00} Single Mode
Max. Noise	1.0% (RMS, 30Hz to 10MHz)
Max. Drift	2.0% (mean power over 8 hrs.)
Max. Warm-Up Time (95% power)	20 minutes, 60 minutes (AH350P)
Operating Temperature	10˚C to 40˚C
Non-Operating Temperature	-30˚C to 60˚C
Dimensions(mm),pourr supply excluded	AH180,AH200: Laser Head: 45 dia. x 637 length AH250, AH300: 1020 x 92.5 x 91.2 AH280: 979.5 x 80.5 x 93 AH350: 1029.97x78.74x75.57

Model	Min Output (TEM_{00})	Beam Diameter ($1/e^2$)	Beam Divergence (TEM_{00})	Minimum Polarization Ratio	Longitudinal Mode Spacing (nomina)
AH180R	18.0mW	1.0mm	1.0mrad	Random	257MHz
AH180P	18.0mW	1.0mm	1.0mrad	500:1	257MHz
AH200R	20.0mW	1.0mm	1.0mrad	Random	257MHz

Model	cw Output Power	Beam Diameter ($1/e^2$)	Beam Divergence ($1/e^2$)	Maximum Mode Sweeping	Polarization	Longitudinal Mode Spacing	Noise
25LHP828-249	25.0mW	1.23mm	0.66mrad	5%	Linear, >500:1	165MHz	<1.0%
25LHP828-230	25.0mW	1.23mm	0.66mrad	5%	Linear, >500:1	165MHz	<1.0%
25LHP928-230	35.0mW	1.23mm	0.66mrad	5%	Linear, >500:1	165MHz	<1.0%
25LHP928-249	35.0mW	1.23mm	0.66mrad	5%	Linear, >500:1	165MHz	<1.0%

He-Ne Lasers (594, 543 nm)

The LASOS Helium Neon laser tubes and modules have a robust mechanical design, excellent beam quality and long service life of up to 20,000 hours. Standard and customized models are available in a large variety in the spectral range green and yellow with output powers between 0.5 and 2.5 mW. Options are random or linear polarization.
All laser models can be provided with adequate OEM and laboratory power supplies, meeting the European and American standards with the availability of approvals and certificates CDRH, IEC, CSA, CE, TÜV, UL.
The helium neon lasers are designed for multi-purpose applications such as confocal laser scanning microscopy, spectroscopy, digital imaging, metrology, industrial measurements, positioning, alignment, aiming, testing, code scanning, medical, basic research, education or entertainment.
Customized solutions for specific applications can be provided.

Model	Wavelenght [nm]	Power [mW] TEM_{00}	polarized	Beam Diameter [mm]	Operating Voltage [V]	Operating Current [mA]	Dimension x L [mm]
AHY200P	594	2.00	polarized	0.79	2400	6.50	45 x 537
AHG050P	543	0.50	polarized	0.85	2400	6.50	45 x 485
AHG075P	543	0.75	polarized	0.85	2400	6.50	45 x 485
AHG100P	543	1	polarized	0.85	2400	6.50	45 x 485
AHG100R	543	1	-	0.88	2800	6.50	45 x 537
AHG150R	543	1.5	-	0.88	2800	6.50	45 x 537
AHG200R	543	2	-	0.88	2800	6.50	45 x 537
AHG250R	543	2.5	-	0.88	2800	6.50	45 x 537