LASOS
For worldwide photonics

He-Ne Laser series

Bright history - brighter future



- Absolute wavelength accuracy 632.816 nm, 593.932 nm, 543.365 nm
- Excellent beam quality
- Reliable and robust
- Long life time
- Outstanding price performance ratio

lasos.com

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LASOS® He-Ne laser series

The LASOS Helium Neon laser tubes and modules have a robust mechanical design, excellent beam quality and lang service life of up to 30,000 hours. Standard and customized models are available in a large variety in the spectral range red, green and yellow with output powers between 0.5 and 20 mW. Options are single mode or multi- mode, randomly or linearly polar- ized and Brewster window tubes for educational and scientific purposes.
All laser models can be provided with adequate OEM and laboratory power supplies, meeting the Euro- pean and American standards with the availability of approvals and certificates CDRH, IEC, CSA, CE, TÜV, UL.

General specifications

Wavelengths (nm)	633, 543, 594
Output power	0.5…20 mW depending on wavelength
Output power stability over 8h after warm-up	≤ ±5 %[1]
Polarization ratio	random or linear >500:1
Noise 10 Hz … 20 MHz	< 1% rms
Warm up period	20 min
Mode purity TEM00	>95 %[2]

[1] Under constant ambient conditions
[2] For single mode models

Options:

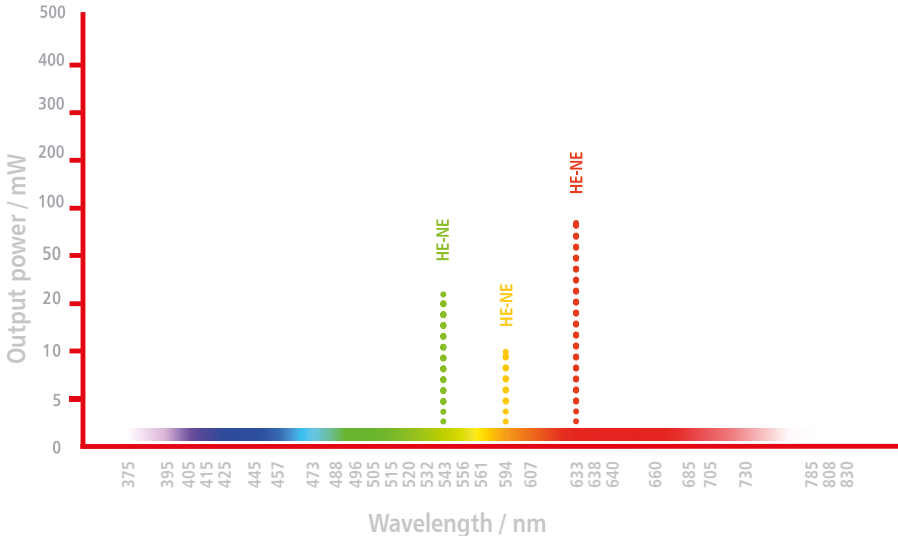
- OEM power supplies
- Laboratory power supplies
- Fiber coupling
- Customized modifications
- He-Ne tubes with brewster windows for educational purposes

Areas of application:

- Microscopy
- Holography
- FTIR spectroscopy
- Raman spectroscopy
- Digital imaging
- Gas sensing
- Fabry perot interferometry

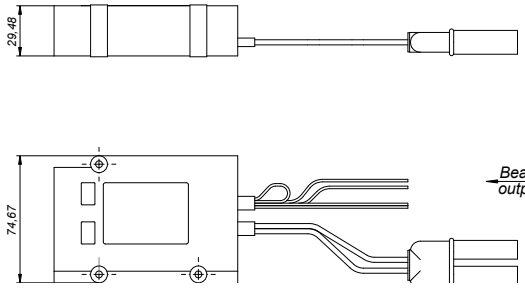
Wavelengths

LASOS He-Ne laser series

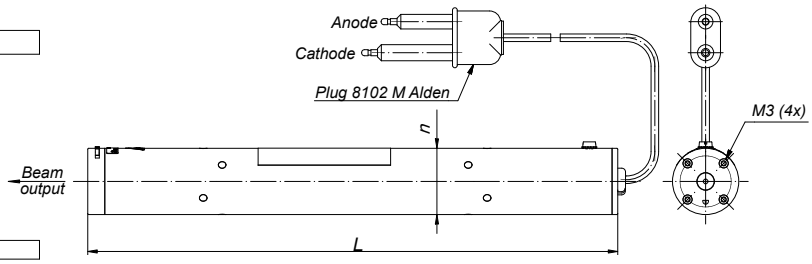


Drawings

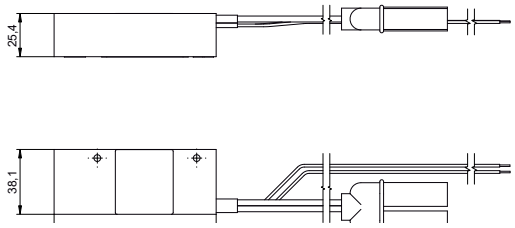
OEM power supply Design A



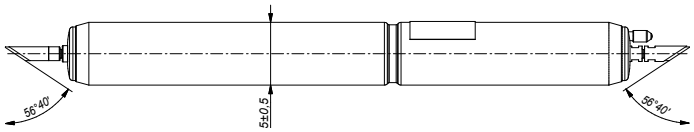
LASOS He-Ne Laser module



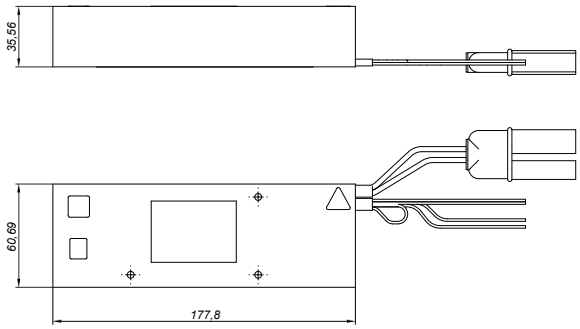
OEM power supply Design B



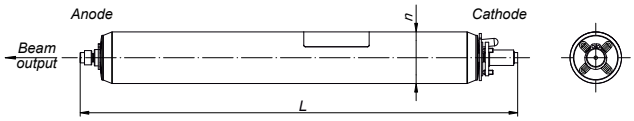
LASOS He-Ne Laser tube with brewster window termination



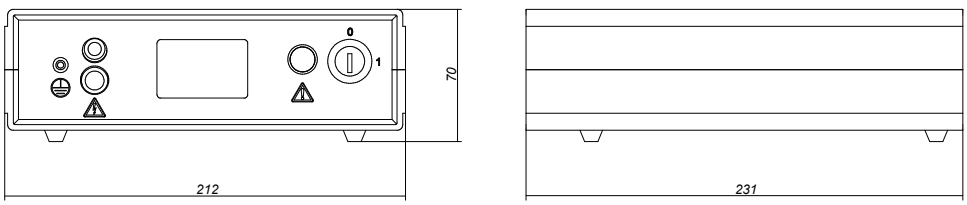
OEM power supply Design C



LASOS He-Ne Laser tube



OEM power supply Design D



Specifications He-Ne laser tubes

Model	Min. output power free beam [mW]	Beam diameter [mm]	Selection criteria	Dimension Ø x L [mm]	Properties
He-Ne laser tubes – wavelength 632.8 nm					
LGR 7656	0.5	0.34			
LGR 7650	0.5	0.49			polarized
LGR 7655	0.6	0.49			
LGR 7655 S	1	0.49			
LGR 7610	2	0.63			
LGR 7610 H	2	0.63			
LGR 7610 P	2	0.63	SL		
LGR 7621 S	2	0.75			
LGR 7621 S01	2.6	0.75			
LGR 7621 S03	2	0.75	PS		
LGR 7634	2	0.75			polarized
LGR 7627	5	0.8			
LGR 7627 BF	5				Brewster window termination
LGR 7628	5	0.8			polarized
LGR 7660 BF01	1				Brewster window termination
LGR 7695-01	0.75	0.49	SF: 1.5 – 2.3 MHz @ 200 G	22.6 x 130	
LGR 7695-02	0.75	0.49	SF: 2.3 – 2.8 MHz @ 260 G	22.6 x 130	
LGR 7695-03	0.75	0.49	SF: 2.8 – 3.8 MHz @ 260 G	22.6 x 130	



Specifications He-Ne laser modules

Model	λ [nm]	P [mW] TEM00	Beam diameter [mm]	Operating voltage [V]	Operating current [mA]	Dimension Ø x L [mm]	Properties
He-Ne laser modules – wavelength 632.8 nm							
LGK 7650-2	632.8	0.5	0.49	1300	3.5	35 x 170	polarized
LGK 7655	632.8	0.6	0.49	1300	3.5	35 x 170	
LGK 7655 S	632.8	1	0.49	1300	3.5	35 x 170	
LGK 7610	632.8	2	0.63	1700	4.9	31.7 x 241.3	
LGK 7610 H[*1]	632.8	2	0.63	1700	4.9	31.7 x 241.3	
LGK 7672	632.8	2	0.75	1300	5.0	35 X 280	
LGK 7634	632.8	2	0.75	1500	5.0	35 X 280	polarized
LGK 7627-8	632.8	5	0.8	2400	6.5	45 X 388	
LGK 7628	632.8	5	0.8	2400	6.5	45 X 400	polarized
LGK 7653-8	632.8	10	0.7	3000	6.5	45 X 505	
LGK 7654-8	632.8	10	0.7	3000	6.5	45 X 505	polarized
LGK 7654-13	632.8	10	0.7	3000	6.5	44.25 X 490	polarized
LGK 7665	632.8	15	1.0	3700	7.0	45 X 637	
LGK 7665 P	632.8	15	1.0	3700	7.0	45 X 637	polarized
He-Ne laser modules – wavelength 594 nm							
LGK7512 P	594	2	0.79	2400	6.5	45 X 537	polarized
He-Ne laser modules – wavelength 543 nm							
LGK 7786 P50	543	0.5	0.85	2400	6.5	45 X 485	polarized
LGK 7786 P100	543	1	0.85	2400	6.5	45 X 485	polarized
LGK 7785-100	543	1	0.88	2800	6.5	45 X 537	
LGK 7785-200	543	2	0.88	2800	6.5	45 X 537	

[*1] With heater

All models availability and technical modifications reserved.



Accessories

Model	Input [V]	Output [kVDC]	Operating current [mA]	Dimension L x W x H [mm]	Design	
OEM power supplies						
LGN 7462	12	2.2-2.5	6.5	101.6 x 38.1 x 25.4	B	DC input
LGN 7463	12	1.25-1.75	5	101.6 x 38.1 x 25.4	B	
LGN 7460 A	115/230	2.2-2.6	6.5	107.95 x 76.2 x 30.48	A	AC input
LGN 7461 A	115/230	1.25-1.75	5	107.95 x 76.2 x 30.48	A	
LGN 7470 A4	115/230	2.5-3.1	6.5	177.8 x 60.96 x 35.56	C	
Bench- top power supplies						
SAN 7460 A	115/230	2.2-2.6	6.5	231 x 212 x 70	D	
SAN 7460 A1	115/230	1.5-2.1	6.5	231 x 212 x 70	D	
SAN 7461 A	115/230	1.25-1.75	5	231 x 212 x 70	D	
SAN 7467 A	115/230	1.2-1.7	3.5	231 x 212 x 70	D	
SAN 7470 A	115/230	3.5	7	231 x 212 x 70	D	
SAN 7470 A4	115/230	2.5-3.1	6.5	231 x 212 x 70	D	
SAN 7460 AJ	100	2.2-2.6	6.5	231 x 212 x 70	D	
SAN 7461 AJ	100	1.25-1.75	5	231 x 212 x 70	D	
SAN 7467 AJ	100	1.2-1.7	3.5	231 x 212 x 70	D	
SAN 7470 AJ	100	3.1-3.7	7	231 x 212 x 70	D	
SAN 7470 A4J	100	2.5-3.1	7	231 x 212 x 70	D	



Model	Input [V]	Output [kVDC]	Operating current [mA]	Dimension L x W x H [mm]	Design		Properties
Additional OEM power supplies							
101 T	12 or 24	3.0-6.5	1100-2450	95.25 x 38.1 x 25.4	B	DC input	TTL input on/ off
106 T	5 or 12	5 or 12	3.35-5.0	81.28 x 33.02 x 21.59	B		
180 T	12 or 24			107.95 x 76.2 x 30.48	A		CDRH time delay High-voltage plug (Alden) Flying leads
314 T	115 / 230, 100 / 200			107.95 x 76.2 x 30.48	A	AC input	CDRH time delay
380 T	115 / 230, 100 / 200			177.8 x 60.96 x 35.56	C		High-voltage plug (Alden) Flying leads

Model	P [mW] TEM00	Beam diameter [mm]	Dimension Ø x L [mm]		Properties
Special selected modules					
LGK 7621 MM	5	1.4	35 x 280		multimode
LGK 7627 MM	10	1.5	45 x 400		multimode
LGR 7621 MM	5	1.4	255 x 30		multimode
LGR 7627 MM	10	1.5	300 x 36,5		multimode