



Ar-Ion laser modules

LASOS® Ar-Ion laser series

The LASOS® Ar-Ion lasers cover a broad spectrum in the blue and green spectral range, with emission lines from 454 nm to 514 nm, in single-wavelength and multi-wavelength versions with output powers up to 225 mW. For photo printing applications in the AGFA d-lab.2 and d-lab.3 printers a dual line laser with emission at 454/458 nm and 514 nm has been developed, showing an excellent beam quality, beam pointing stability and long-term stability with low-noise operation.

All laser tubes have an internal mirror vacuum-tight hard-sealed and integrated resonator construction optimizing the life time and power stability. The laser mirrors are adjusted and fixed by a special, proprietary technology providing maintenance-free operation and no need for readjustment in the field. The LASOS laser modules are compact, economical and are available with several cooling options. All laser models can be provided with OEM power supplies, designed to meet the European and American standards with availability of approvals and certificates CDRH, IEC, CSA, CE, TÜV, UL.

The lasers are designed for multi-purpose solutions for scientific and OEM applications such as confocal laser scanning microscopy, DNA sequencing, flow cytometry, analytical chemistry, fast-flow-rate particle measurements, digital imaging, medical, basic research or entertainment.

Customized solutions for specific applications as well as a fiber coupling option are available.

For particular models a tube exchange is available.

Model	Wavelength [nm]	Output Power [mW]	Beam Diameter [mm]	Dimension L x W x H [mm]	Design	Power Supply
Multi-Line						
LGK 7801 BM6	454.5-496.5*1	20	0.65	333.5 x 130 x 154	A	LGN 4000
LGK 7872 BM	454.5-496.5*1	30	0.65	333.5 x 150 x 171	B	LGN 4000
LGK 7801 ML6	454.5-514.5	25	0.66	333.5 x 130 x 154	A	LGN 4000
LGK 7872 ML	454.5-514.5	40	0.66	333.5 x 150 x 171	B	LGN 4000
LGK 7877 ML01	454.5-514.5	100	0.75	395.2 x 119.4 x 158.2	C	8470
LGK 7880 ML01	454.5-457.5	225	0.8	454.8 x 154.2 x 196.4	D	8470
Single Line						
LGK 7872 BL	454.5/457.5	5	0.64	335.5 x 150 x 171	B	LGN 4000
LGK 7801 M6	488	12	0.66	333.5 x 130 x 154	A	LGN 4000
LGK 7872 M	488	20	0.66	335.5 x 150 x 171	B	LGN 4000
LGK 7801 GL6	514.5	10	0.64	335.5 x 130 x 154	A	LGN 4000
LGK 7872 GL	514.5	15	0.64	335.5 x 150 x 171	B	LGN 4000
Dual Line						
LGK 7890	454/457/514	4@454/457 nm 10@514nm	0.65/0.69	333.5 x 150 x 171	B	LGN 7872-02

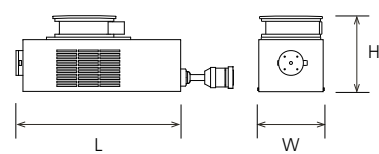
*1 Line at 496.5 may not be emitted.

Output power is nominal value at delivery and operating current ≤ 7 A. Operating at higher power reduces life time.

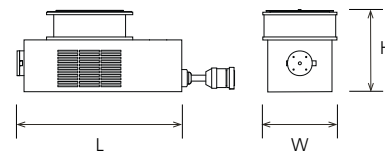
General specifications:

- Output power stability (2 h): $\pm 1\%$
- Warm up time: 15 min
- Beam quality M^2 : < 1.2
- Polarization: $\approx 500:1$ vertical
- Noise: $\approx 1\%$ rms

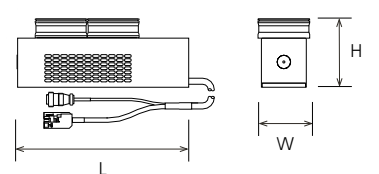
Design A



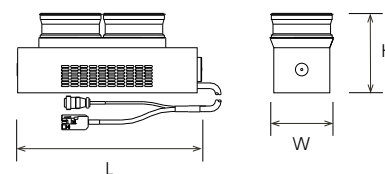
Design B



Design C



Design D

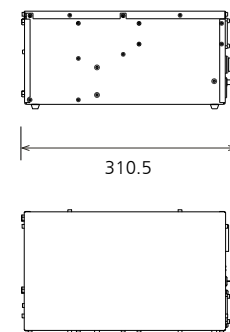


Ar-Ion laser power supplies

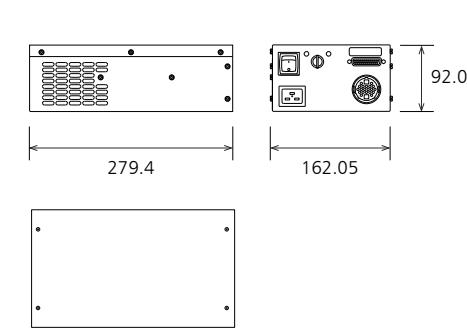
Model	Input [VAC/Hz]	Output [VDC]	Operating Current [A]	Remote Control
LGN 4000	100- 240 / 47-63	70-150	3.5-9	RMC 7812 Z
LGN 7872-02	200-240 / 47-63	70-150	3.5-9	-
8470	200-240 / 47-63	70 220	3.0-12	RMC 8470-01Z1

Dimensions [mm]

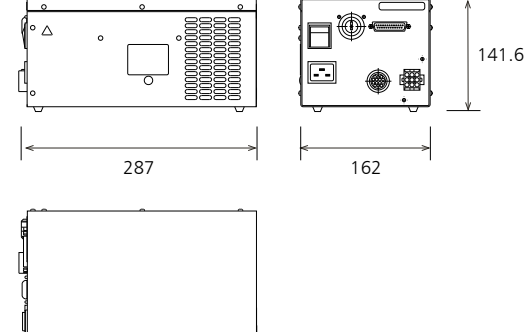
LGN 4000



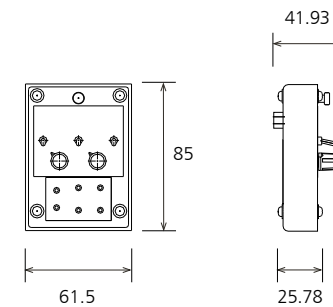
LGN 7872-02



8470



Remote control



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