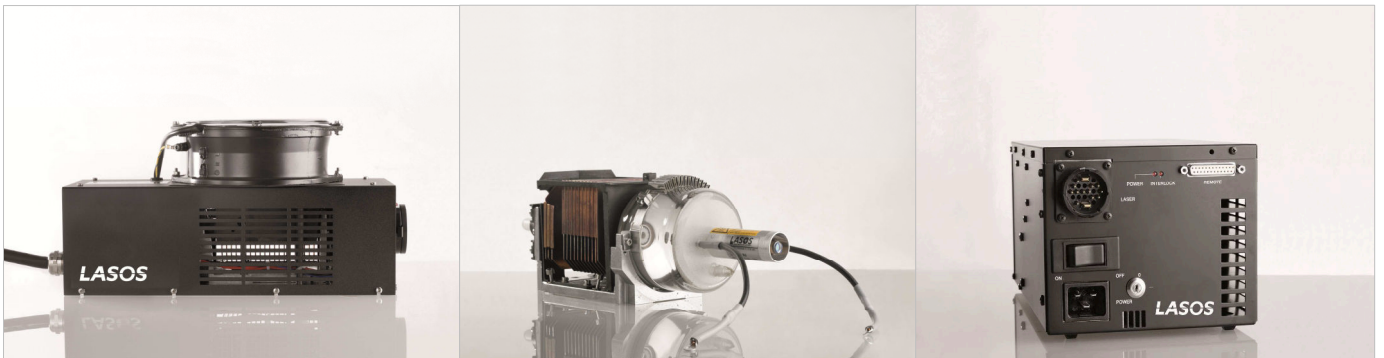
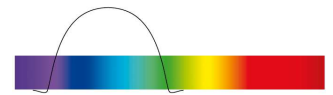


# **LASOS<sup>®</sup>** Ar-Ion laser series



Argon-Ion laser modules  
Argon-Ion laser power supplies





## 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 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, CDA, CE, TÜV, UL.

The lasers are designed for multi-purpose solutions for scientific and OEM applications:

- Confocal Laser Scanning Microscopy
- DNA Sequencing
- Flow Cytometry
- Analytical Chemistry
- Fast-Flow-Rate Particle Measurements
- Digital Imaging
- Medical
- Basic Research
- Entertainment

Customized solutions for specific applications as well as a fiber coupling option are available. For particular models a tube exchange is available.

# LASOS

For worldwide photonics

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| Model             | Wavelength [nm] | Output Power [mW] | Beam Diameter [mm] | Dimensions L x H x W [mm] | Design | Power Supply |
|-------------------|-----------------|-------------------|--------------------|---------------------------|--------|--------------|
| <b>Multi-Line</b> |                 |                   |                    |                           |        |              |
| LGK 7801 BM6      | 454.5-496.5*1   | 20                | 0.65               | 333.5 x 130 x 154         | A      | LGN 4000     |
| LGK 7872 M        | 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     |

### Single Line

|              |             |    |      |                   |   |          |
|--------------|-------------|----|------|-------------------|---|----------|
| LGK 7872 BL  | 454.5/457.5 | 5  | 0.64 | 333.5 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 | 333.5 x 150 x 171 | B | LGN 4000 |
| LGK 7801 GL6 | 514.5       | 10 | 0.64 | 333.5 x 130 x 154 | A | LGN 4000 |
| LGK 7872 GL  | 514.5       | 15 | 0.64 | 333.5 x 150 x 171 | B | LGN 4000 |

### Dual Line

|          |             |           |           |                   |   |             |
|----------|-------------|-----------|-----------|-------------------|---|-------------|
| LGK 7890 | 454/457/514 | 4@454/457 | 0.65/0.69 | 333.5 x 150 x 171 | B | LGN 7872-02 |
|          |             | 10@514    |           |                   |   |             |

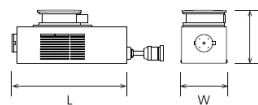
\*1 Line at 496.5 may not be emitted.

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

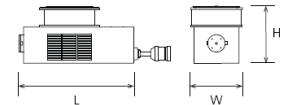
### General Specifications:

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

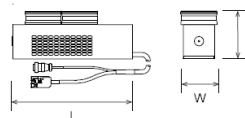
Design A



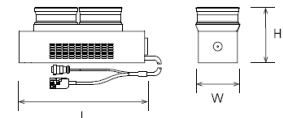
Design B



Design C



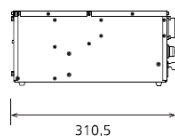
Design D



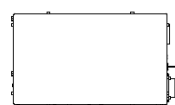
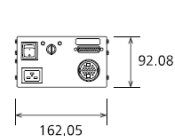
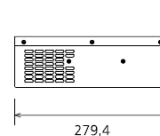
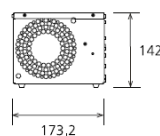
## Ar-Ion laser power supplies

| 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                 | -              |

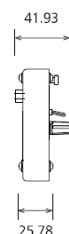
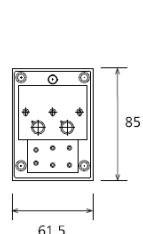
LGN 4000



LGN 7872-02



Remote control



Dimensions [mm]