



MGL-S series (500-580nm)



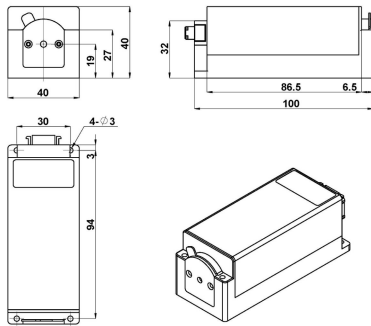
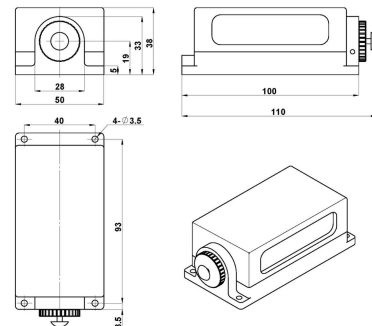
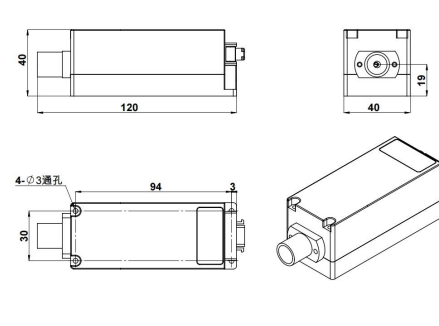
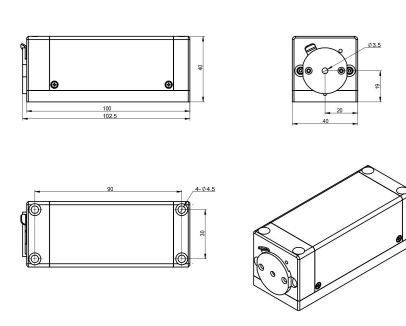
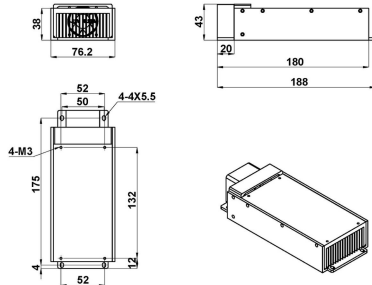
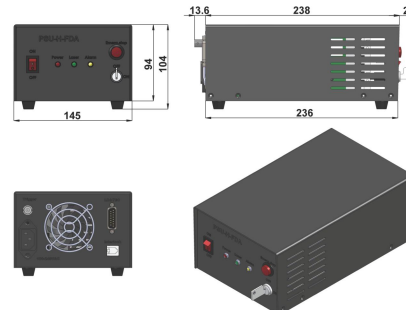
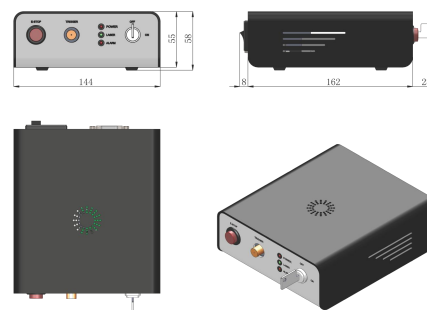
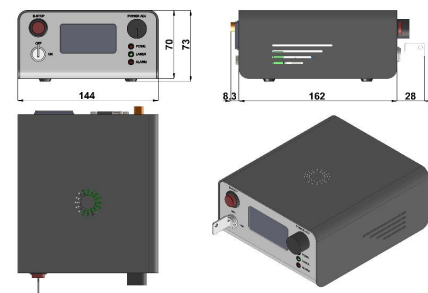
LD PUMPED ALL-SOLID-STATE LASER

The all-solid-state laser features high output power stability, a good beam profile, an ultra-compact size, a wide operating temperature range, excellent sealing, a long lifetime, cost-effectiveness, and easy operation. It is capable of working under a low pressure of 0.02 kPa and is widely used in various applications, including collimation, laser medical treatment, scientific experiments, optical instrumentation, laser displays, and laser lighting shows.



SPECIFICATIONS

| Model                                                           | MGL-S-532                                                          | MGL-S-532-A<br>(Harsh condition) | MGL-S-532-D                         |         | MGL-S-561                                 | MGL-S-577                              | MGL-S-577-A<br>(Harsh condition) |
|-----------------------------------------------------------------|--------------------------------------------------------------------|----------------------------------|-------------------------------------|---------|-------------------------------------------|----------------------------------------|----------------------------------|
| Wavelength (nm)                                                 | 532±1                                                              |                                  |                                     |         | 561±1                                     | 577±2                                  |                                  |
| Operating mode                                                  | CW                                                                 |                                  |                                     |         |                                           |                                        |                                  |
| Output power (mW) <sup>1</sup>                                  | 1-300                                                              |                                  | 1-100                               | 100-300 | 1-80                                      | 1-30                                   |                                  |
| Power stability (rms, 4 hours ±3°C)                             | <3%, <2%, <1%, (<0.5%@1-100mW)                                     |                                  | <1%, <0.5%                          | <1%     | <3%, <2%, <1%                             |                                        |                                  |
| Transverse mode                                                 | TEM <sub>00</sub>                                                  |                                  |                                     |         |                                           |                                        |                                  |
| M <sup>2</sup>                                                  | <1.2, <1.1                                                         |                                  |                                     |         | <1.2                                      |                                        |                                  |
| Beam diameter at the aperture (1/e <sup>2</sup> , mm)           | <1.0                                                               |                                  |                                     |         |                                           |                                        |                                  |
| Beam divergence (mrad)                                          | <1.5                                                               |                                  |                                     |         |                                           |                                        |                                  |
| Polarization ratio                                              | >100:1, Horizontal (Vertical optional)                             |                                  |                                     |         | >100:1, Vertical<br>(Horizontal optional) | >100:1, Horizontal (Vertical optional) |                                  |
| Warm-up time (minutes)                                          | <5                                                                 |                                  |                                     |         |                                           |                                        |                                  |
| Pointing stability (μrad) (over 2 hours after warm-up and ±3°C) | <50                                                                |                                  |                                     |         |                                           |                                        |                                  |
| Pointing stability over temperature (μrad/°C)                   | <8                                                                 |                                  | <6                                  |         | <8                                        |                                        |                                  |
| Beam height from base plate (mm)                                | 19                                                                 |                                  |                                     |         |                                           |                                        |                                  |
| Power consumption (W)                                           | <30                                                                |                                  | <10                                 |         | <30                                       |                                        |                                  |
| Fiber (optional)                                                | Multi mode/Single<br>moode                                         | /                                | Multi mode/Single moode             |         | /                                         |                                        | Multi mode/Single mode           |
| Shock tolerance (6ms)                                           | 7g laterally, 15g vertically                                       |                                  |                                     |         |                                           |                                        |                                  |
| Max. heat dissipation of head (W)                               | 4W@25°C                                                            | 10W@50°C                         | /                                   |         |                                           | 4W@25°C                                | 10W@50°C                         |
| IP rating                                                       | IP65                                                               | IP67                             | /                                   |         | IP65                                      |                                        | IP67                             |
| Operating temperature (°C)                                      | 10-35                                                              | 0-60                             | 10-35                               |         |                                           |                                        | 0-60                             |
| Modulation optional                                             | DC-1kHz, 1kHz-10kHz, 10kHz-30kHz optional; TTL and Analog optional |                                  |                                     |         |                                           |                                        |                                  |
| Power supply (100-240VAC)                                       | PSU-A-F/ PSU-A-D                                                   | PSU-H-FDA                        | /                                   |         | PSU-A-F/ PSU-A-D                          |                                        | PSU-H-FDA                        |
| Power supply (12VDC)                                            | /                                                                  |                                  | 12VDC<br>(Photoelectric integrated) |         | /                                         |                                        |                                  |
| Expected lifetime (hours)                                       | >10000                                                             |                                  |                                     |         |                                           |                                        |                                  |

| LASER HEAD <sup>2</sup>                                                                                                                   | LASER HEAD (Harsh condition) <sup>2</sup>                                                                                                     | LASER HEAD (MGL-S-561) <sup>2</sup>                                                                                                         | LASER HEAD (MGL-S-532-D) <sup>2</sup>                                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
|  <p>100 (L) × 40 (W) × 40 (H) mm<sup>3</sup>, 0.36kg</p> |  <p>245.5(L) × 88(W) × 74(H) mm<sup>3</sup>, 2.0kg</p>      |  <p>120 (L) × 40 (W) × 40 (H) mm<sup>3</sup>, 0.37kg</p> |  <p>102.5 (L) × 40 (W) × 40 (H) mm<sup>3</sup>, 0.36kg</p> |
| HEATSINK (optional TC-04-FS)                                                                                                              | POWER SUPPLY (PSU-H-FDA) <sup>3</sup>                                                                                                         | POWER SUPPLY (PSU-A-F) <sup>3</sup>                                                                                                         | POWER SUPPLY (PSU-A-D) <sup>4</sup>                                                                                                           |
|  <p>188(L) × 76.2(W) × 43(H) mm<sup>3</sup>, 0.65kg</p> |  <p>276.6(L) × 145(W) × 103.6(H) mm<sup>3</sup>, 2.3kg</p> |  <p>198(L) × 144(W) × 58(H) mm<sup>3</sup>, 0.5kg</p>   |  <p>198.3 (L) × 144(W) × 73(H) mm<sup>3</sup>, 0.6kg</p>  |

1 Any power level can be selected in this range.

2 The laser head needs to be used on a heat sink with good heat dissipation.

3 Fixed output power.

4 Output power adjustable 10-100%; RS232 control optional.