



MLL-S series (500-560nm)



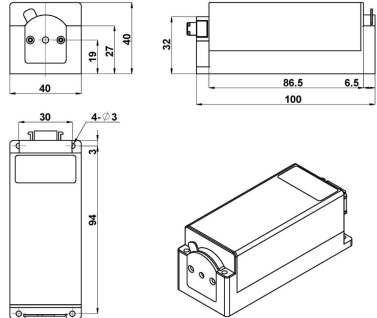
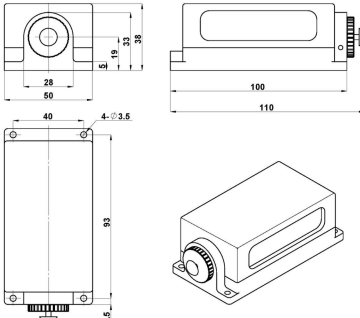
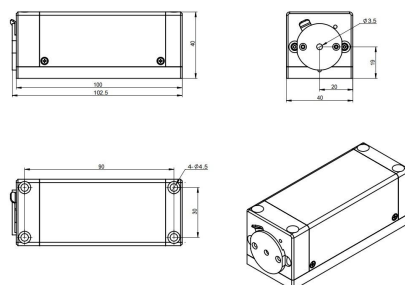
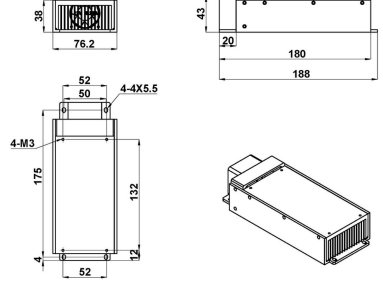
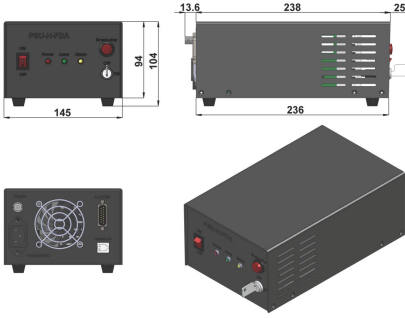
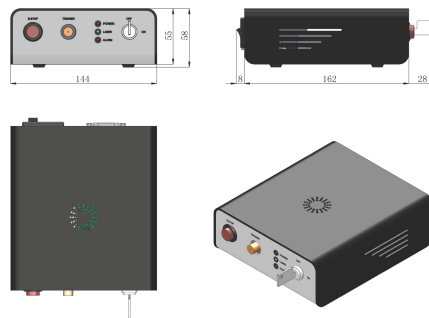
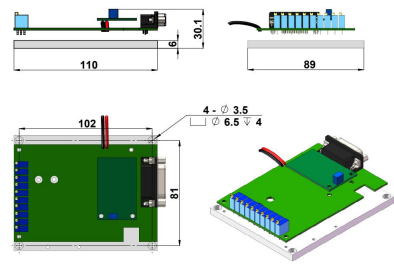
LD PUMPED ALL-SOLID-STATE LOW NOISE LASER

All-solid-state laser is characterized by an ultra-compact size, a wide operating temperature range, excellent sealing, a long lifetime, cost-effectiveness, and easy operation. It operates at a low pressure of 0.02kPa and is widely used in DNA sequencing, flow cytometry, cell sorting, optical instruments, spectral analysis, interference, measurement, holography, laser printing, chip inspection, physics experiment, and more.



SPECIFICATIONS

| Model                                                              | MLL-S-532                              | MLL-S-532-A (Harsh condition) | MLL-S-532-D (Normal condition)     |
|--------------------------------------------------------------------|----------------------------------------|-------------------------------|------------------------------------|
| Central wavelength (nm)                                            | 532 ± 1                                |                               |                                    |
| Operating mode                                                     | CW                                     |                               |                                    |
| Output power (mW) <sup>1</sup>                                     | 1-300                                  |                               |                                    |
| Power stability (rms, 4 hours ±3°C)                                | <3%, <2%, <1%, (<0.5% @ 1-100mW)       |                               |                                    |
| Transverse mode                                                    | TEM <sub>00</sub>                      |                               |                                    |
| Spectral line width (nm)                                           | <0.1, (<0.003 optional @ 1-100mW)      |                               |                                    |
| Noise of amplitude (rms, 20-20MHz)                                 | <1%, <0.5%                             |                               |                                    |
| M <sup>2</sup>                                                     | <1.2, <1.1                             |                               |                                    |
| Beam diameter at the aperture (1/e <sup>2</sup> , mm)              | <1.0                                   |                               |                                    |
| Beam divergence, full angle (mrad)                                 | <1.5                                   |                               |                                    |
| Polarization ratio                                                 | >100:1, Horizontal (Vertical optional) |                               |                                    |
| Warm-up time (minutes)                                             | <5                                     |                               |                                    |
| Pointing Stability (μrad)<br>(over 2 hours after warm-up and ±3°C) | <50                                    |                               |                                    |
| Pointing stability over temperature (μrad/°C)                      | <8                                     |                               |                                    |
| Beam height from base plate (mm)                                   | 19                                     |                               |                                    |
| Laser head consumption (W)                                         | <40                                    |                               |                                    |
| Shock tolerance (6ms)                                              | 7g laterally, 15g vertically           |                               |                                    |
| Max. laser head base plate temp (°C)                               | 4W@25°C                                | 10W@25°C                      | /                                  |
| Operating temperature (°C)                                         | 10-35                                  | 0-60                          | 15-35                              |
| IP rating                                                          | IP65                                   | IP67                          | /                                  |
| Power supply (100-240VAC)                                          | PSU-A-F                                | PSU-H-FDA                     | /                                  |
| Operating voltage (VAC)                                            | PSU-A-F (5V/5A)                        | /                             | 12VDC (220VAC Controller optional) |
| Expected lifetime (hours)                                          | >10000                                 |                               |                                    |

| LASER HEAD <sup>2</sup>                                                                                                                       | LASER HEAD (Harsh condition) <sup>2</sup>                                                                                                | LASER HEAD (MLL-S-532-D) <sup>2</sup>                                                                                                       | HEATSINK (optional TC-04-FS)                                                                                                                |
|-----------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
|  <p>100 (L) × 40 (W) × 40 (H) mm<sup>3</sup>, 0.36kg</p>     |  <p>110(L) × 50(W) × 38(H) mm<sup>3</sup>, 0.6 kg</p>  |  <p>102.5(L) × 40(W) × 40(H) mm<sup>3</sup>, 0.36 kg</p> |  <p>188(L) × 76.2(W) × 43(H) mm<sup>3</sup>, 0.65 kg</p> |
| POWER SUPPLY (PSU-H-FDA) <sup>3</sup>                                                                                                         | POWER SUPPLY (PSU-A-F) <sup>3</sup>                                                                                                      | DRIVER (PSU-A-F) <sup>3</sup>                                                                                                               |                                                                                                                                             |
|  <p>276.6(L) × 145(W) × 103.6(H) mm<sup>3</sup>, 2.3 kg</p> |  <p>198(L) × 144(W) × 58(H) mm<sup>3</sup>, 0.5kg</p> |  <p>110(L) × 89(W) × 30.1(H) mm<sup>3</sup>, 0.32kg</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.