



MSL-R series (401-700nm)

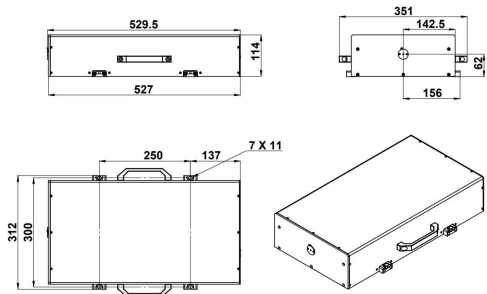
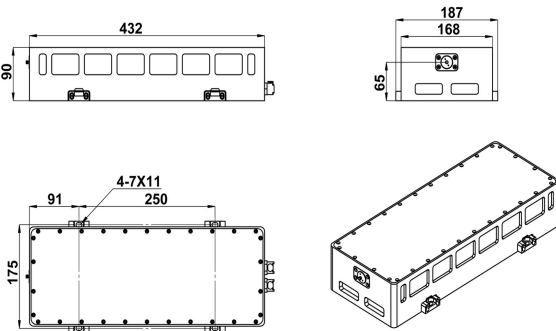
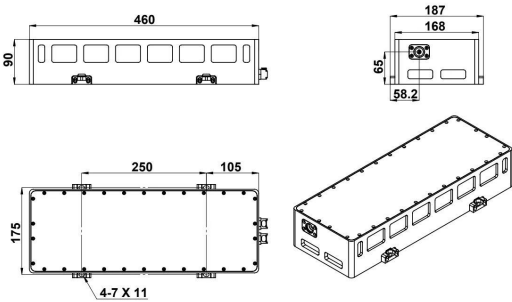
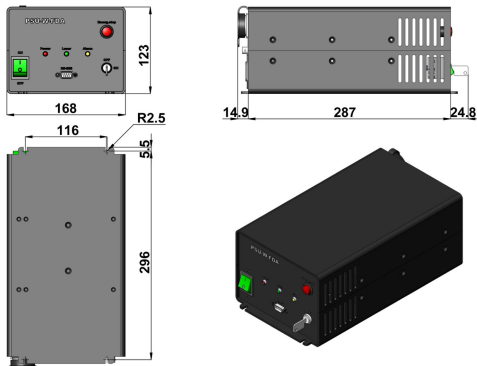
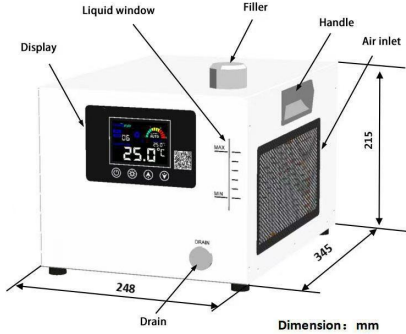
SINGLE LONGITUDINAL MODE LASER

All-solid-state-single-longitudinal mode laser features ultra-compact design, easy operation, high power and stability, which is perfect for flow cytometry, spectrum analysis, microscopy, semiconductor inspection, cell sorting, optical instruments, and physics experiments, etc.



SPECIFICATIONS

|                                                                   |                                        |                                        |                                        |                                   |                                        |          |
|-------------------------------------------------------------------|----------------------------------------|----------------------------------------|----------------------------------------|-----------------------------------|----------------------------------------|----------|
| Wavelength (nm)                                                   | 457±1                                  | 522±1                                  | 532±1                                  | 607±1                             | 639±1                                  | 698±1    |
| Output power (mW) <sup>1</sup>                                    | 350mW-3.5W                             | 150-500                                | 1W-15W                                 | 200mW-1W                          | 650mW-3W                               | 300mW-1W |
| Power stability (rms, 4 hours ±3°C)                               | <3%, <2%, <1%                          |                                        |                                        | <1%, (<0.5%optional@1W-5W)        |                                        |          |
| Transverse mode                                                   | TEM <sub>00</sub>                      |                                        |                                        |                                   |                                        |          |
| Longitudinal mode                                                 | Single                                 |                                        |                                        |                                   |                                        |          |
| Operating mode                                                    | CW                                     |                                        |                                        |                                   |                                        |          |
| Noise of amplitude (rms, 20Hz-20MHz)                              | <1%, <0.5%                             |                                        |                                        | <1%, <0.5%, (<0.1 optional@1W-5W) |                                        | <0.5%    |
| M <sup>2</sup>                                                    | <1.2                                   | <1.3                                   | <1.2                                   | <1.3                              |                                        |          |
| Beam diameter at the aperture (1/e <sup>2</sup> , mm)             | <1.5                                   | ~1.5                                   | <2.2                                   | ~1.5                              |                                        |          |
| Beam divergence, full angle (mrad)                                | <0.5                                   | <1.5                                   | <0.5                                   | <1.5                              |                                        |          |
| Polarization ratio                                                | >100:1, Horizontal (Vertical optional) | >100:1, Vertical (Horizontal optional) | >100:1, Horizontal (Vertical optional) |                                   | >100:1, Vertical (Horizontal optional) |          |
| Spectral line width (nm)                                          | <5MHz                                  |                                        |                                        |                                   |                                        |          |
| 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)                                  | 62                                     | 65                                     |                                        |                                   |                                        |          |
| Coherent length (m)                                               | >50                                    |                                        |                                        |                                   |                                        |          |
| Warm-up time (minutes)                                            | <15                                    |                                        |                                        |                                   |                                        |          |
| Cooled method (water cooled)                                      | WCH-580                                |                                        |                                        |                                   |                                        |          |
| Operating temperature (°C)                                        | 20-30                                  |                                        |                                        |                                   |                                        |          |
| Power supply (100-240VAC)                                         | PSU-W-FDA                              |                                        |                                        |                                   |                                        |          |
| Expected lifetime (hours)                                         | >10000                                 |                                        |                                        |                                   |                                        |          |

| LASER HEAD (MSL-R-457)                                                                                                                       | LASER HEAD (MSL-R-532)                                                                                                                        | LASER HEAD (MSL-R-522/ 607/ 639/ 698)                                                                                                    |
|----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
|  <p>529.5(L) × 312(W) × 114(H) mm<sup>3</sup>, 29.35 kg</p> |  <p>432(L) × 187(W) × 90(H) mm<sup>3</sup>, 11.5 kg</p>     |  <p>460(L) × 187(W) × 90(H) mm<sup>3</sup>, 12 kg</p> |
| POWER SUPPLY <sup>2</sup>                                                                                                                    | Water Chiller (WCH-580)                                                                                                                       |                                                                                                                                          |
|  <p>326.7 (L) × 168(W) × 123(H) mm<sup>3</sup>, 4.0 kg</p> |  <p>345 (L) × 248 (W) × 215(H) mm<sup>3</sup>, 10.5 kg</p> |                                                                                                                                          |

1 Any power level can be selected in this range.

2 Fixed output power.