

**MSL-DU-xxx-W series**



**FREQUENCY STABILIZED SLM LASER**

Single longitudinal mode, frequency stabilized laser is made features of stable frequency and internal SLM calibration, which is used in optical frequency standards, gravitational wave detection, tests of fundamental physics, atomic clocks, high resolution spectrum, Laser Radar, precision measurement, etc.



**SPECIFICATIONS**

|   |   |
|---|---|
| Wavelength (nm)                                       | 639±1   |
| Output power (mW)                                     | 1-450   |
| Power stability (rms, over 4 hours)                   | <1%, <2%, <3%                                   |
| Transverse mode                                       | TEM <sub>00</sub>                               |
| Longitudinal mode                                     | Single  |
| Operating mode  | CW  |
| Spectral linewidth (nm)                               | <0.00001  |
| Coherent length (m)                                   | >40   |
| Frequency shift over 8 hours                          | ≤±100 MHz (±0.15pm)                             |
| Noise of amplitude (rms, 1Hz~20MHz)                   | <0.5%, <1%                                      |
| M <sup>2</sup> factor                                 | <1.2 (<1.1 Optional)                            |
| Beam diameter at the aperture (1/e <sup>2</sup> , mm) | <1.5  |
| Beam divergence (mrad)                                | <1.5  |
| Polarization Ratio                                    | >100:1, Horizontal±5 degree (Vertical Optional) |
| Pointing stability after warm-up ( μ mrad/°C)         | <6  |
| Warm-up time (minutes)                                | <30   |
| Beam height from base plate (mm)                      | 47.4  |
| Cooled method (Water Cooled)                          | WCH-600   |
| Operating Temperature (°C)                            | 15-35   |
| Power supply (90-264VAC)                              | PSU-SR  |
| Expected lifetime (hours)                             | 10000   |
| Warranty  | 1 year  |

**Note: The laser head needs to be used on a heat sink with good heat dissipation.**



| LASER HEAD  | POWER SUPPLY                                       | Water Chiller(WCH-600)                              |
|---|--|---|
| <p>223.5 (L)×115(W) ×75(H) mm<sup>3</sup>,2.1kg</p> | <p>188(L) ×145(W) ×83(H) mm<sup>3</sup>, 1.2kg</p> | <p>270(L) ×320(W) ×330(H) mm<sup>3</sup>, 18 kg</p> |