



MSL-FN-457-S/1-350mW



**FREQUENCY STABILIZED SLM
LASER**

Single longitudinal mode, frequency stabilized laser is made features of stable frequency and low frequency noise, 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

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| Wavelength (nm) | 457±1 | |
| Operating mode | CW | |
| Output power (mW) | >1, 5, 10, 20, ... , 150 | >150, 160, ... , 350 |
| Power stability (rms, over 4 hours) | <1%, <2%, <3% | <2%, <3%, <5% |
| Transverse mode | TEM ₀₀ | Near TEM ₀₀ |
| Longitudinal mode | Single | |
| Spectral linewidth (nm) | <0.00001 | |
| Noise of amplitude (rms, 1Hz~20MHz) | <1%, typical<0.5% | |
| Beam diameter at the aperture (1/e ² , mm) | <2.0 | |
| Beam divergence, full angle (mrad) | <1.2 | |
| Polarization ratio | >100:1, Vertical±5 degree (Horizontal Optional) | |
| Warm-up time (minutes) | <10 | |
| Pointing stability after warm-up (mrad) | <0.05 | |
| Frequency shift over 8 hours (MHz) | ≤±200 | |
| Frequency shift with Temp (MHz/°C) | <200 | |
| Coherent length (m) | >50 | |
| M ² factor | <1.2 | |
| Extra heatsink | TC-01 | |
| Expected lifetime (hours) | 10000 | |
| Warranty | 1 year | |



Note: The system includes the laser and the heatsink.

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| <p style="text-align: center;">MSL-FN-457</p> <p style="text-align: center;">197(L)×70(W)×50(H) mm³, 1.5 kg</p> | <p style="text-align: center;">PSU-H-FDA</p> <p style="text-align: center;">275(L)×145(W)×104(H) mm³, 2.3 kg</p> | <p style="text-align: center;">TC-01 Heatsink</p> <p style="text-align: center;">197(L)×117.5(W)×57.3(H) mm³, 1.6 kg</p> | <p style="text-align: center;">Driver</p> <p style="text-align: center;">277(L)×145(W)×106(H) mm³, 2.6 kg</p> |
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