



MLL-U-xxx-SU series (1301-1500nm)



LOW NOISE INFRARED LASER

The all-solid-state, low-noise infrared laser features an ultra-compact design, a long lifetime, and easy operation. It is widely used in scientific experiments, optical sensing, measurement, instrumentation, communication, spectral analysis, and more.



SPECIFICATIONS

Wavelength (nm)	1313±1		1319±1	1342±1		1444±2
Operating mode	CW					
Output power (mW) ¹	1-700	700-1000	1-200	1-800	800-2000	1-400
Power stability (rms, 4 hours ±3°C)	<3%, <2%, <1%	<3%, <2%	<3%, <2%, <1%		<3%, <2%	
Spectral line width (nm)	<1.0, <0.1, (<0.006 optional@1-500)		<0.006	<1.0, <0.1, (<0.006 optional@1-800)		<1.0, <0.1
Transverse mode	TEM ₀₀					
Noise of amplitude (rms, 20Hz-20MHz)	<1%					
M ²	<1.2		<1.5	<1.2		<1.5
Beam diameter at the aperture (1/e ² , mm)	~1.5					
Beam divergence (mrad)	<1.5					
Polarization ratio	>100:1, Horizontal (Vertical optional)					
Warm-up time (minutes)	<5					
Pointing stability (μrad) (over 2 hours after warm-up and ±3°C)	<50					
Beam height from base plate (mm)	27.4					
Operating temperature (°C)	10-35					
Power supply (100-240VAC)	PSU-H-FDA					
Power supply (12VDC)	PSU-SR-OEM (12V/25A)					
Expected lifetime (hours)	>10000					

LASER HEAD ³	HEATSINK (optional TC-02-FS)
<p>160(L)×60(W) ×50(H) mm³, 0.9kg</p>	<p>202(L)×110(W)×47.5(H) mm³, 1.25kg</p>
POWER SUPPLY (PSU-H-FDA) ⁴	DRIVER (PSU-SR-OEM) ⁴
<p>276.6(L) ×145(W) ×103.6(H) mm³, 2.3kg</p>	<p>150(L) ×111(W) ×41.3(H) mm³, 0.8kg</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.