

532nm CW Single-frequency Narrow Linewidth DPSS Laser (100mW)



Product Description

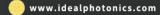
IdealPhotonics offers a 532nm CW single-frequency narrow linewidth DPSS laser that utilizes their proprietary self-aligning resonator technology. The AMR design integrates the resonator of the LMX series single-longitudinal-mode lasers into a compact optical component with extremely low loss. The self-aligning resonator technology ensures the long-term reliability, temperature stability, and insensitivity to mechanical vibrations of the single-longitudinal-mode laser. The 532nm single-longitudinal-mode laser has a linewidth of far less than 1 MHz, power stability of ±1% (can reach 0.5% if required), a beam quality of less than 1.1, and a maximum power of up to 2W. This is a highly cost-effective product for applications in Raman detection, interferometric measurement, holographic storage, biosensing, confocal microscopy, material analysis, and other fields.

Part Number

MP-532-100-SM











Product features

CW: Ultraviolet, Blue, Green, Red, Infrared Novel proprietary design for single-mode operation Very low noise: <0.5% Power range from 10 mW to 10 W

Application area

Laser interferometry、Raman spectroscopy、Holography、Nonlinear optics、Laser microscopy

Technical Parameters

Characteristics	Min	Max	Unit	Notes
Wavelength	532	532.5	nm	
Beam Quality	1.05	1.1	NA	
Coherence Length	300	400	m	
Noise	0.1	0.3	%	10 Hz – 1 GHz
Output Power	90	100	mW	
Power Adjustable	10	100	%	
Linewidth	300	500	KHZ	
Beam Spot Diameter	0.3	0.35	mm	
Divergence Angle	2	2.2	mrad	
Warm-up Time	3	8	Min	
Temperature Control Range	0	50	οС	
Power Consumption		35	W	
Polarization Ratio	1:200		NA	
Vertical Pointing Stability		5	urad/°C	
Long-term Stability	2	3	%	8 hours stability
Input Working Voltage	0	24	V	@5A current
Laser Head Size (integrated)	250x105x80		mm3	
Laser Head Size (cooling plate design)	120x65x60		mm3	



