



nLIGHT's DPSS 1064nm Microlaser M4 is designed with integrated output optics, thermal control and a complete electronics package for a wide range of applications. Pumped with nLIGHT's patented nXLT diodes, the Microlaser M4 offers exceptional beam quality and high pulse energy from a compact package.

The Microlaser M4 is engineered for easy integration and maintenance free operation that helps lower the cost and improve the reliability of your product.

The passively Q-switched Microlaser M4 is a proven product with years of field data.

Features

- Patented nXLT™ diode protection for extended life
- Integrated output optics
- Easy integration
- Excellent beam quality
- Compact package

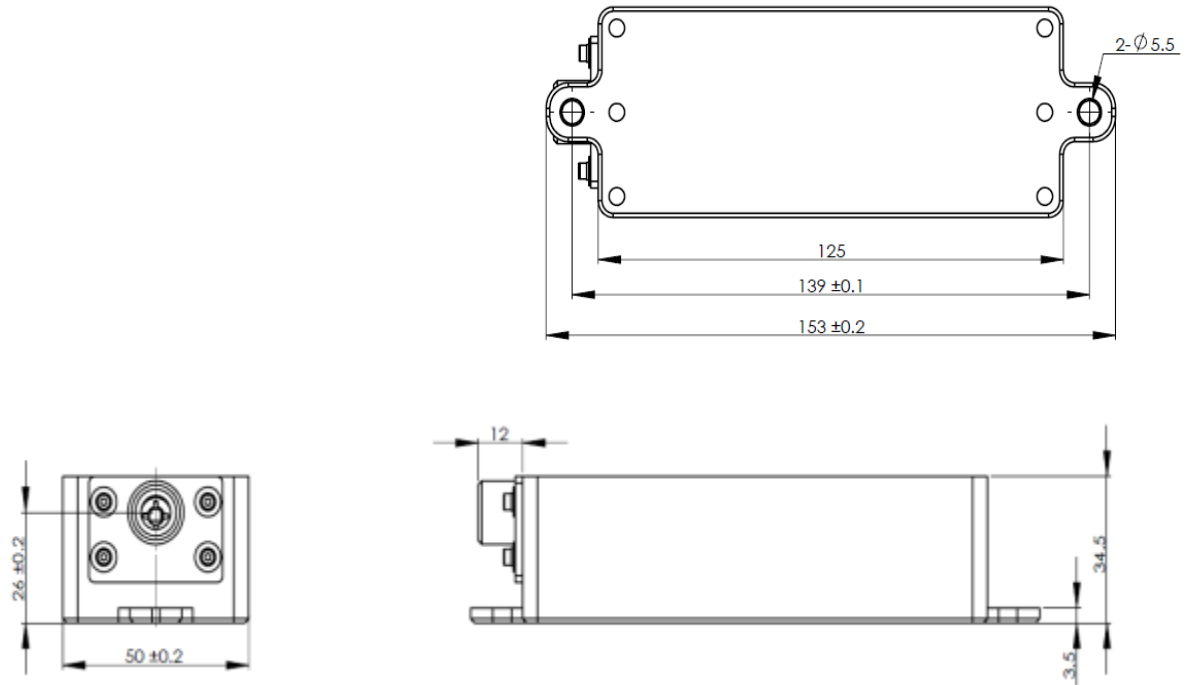
Applications

- Diamond Planning
- Marking
- Biophotonics
- Lidar
- Remote sensing
- Instrumentation

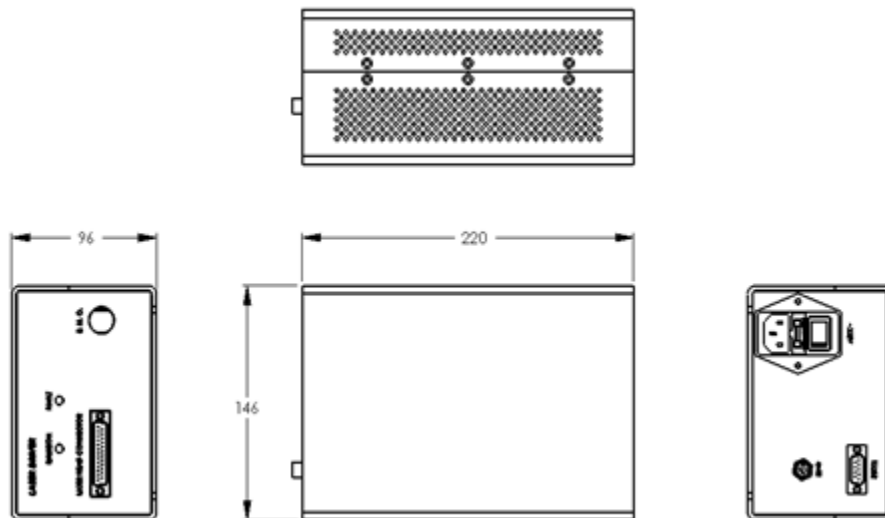
Typical Laser Performance

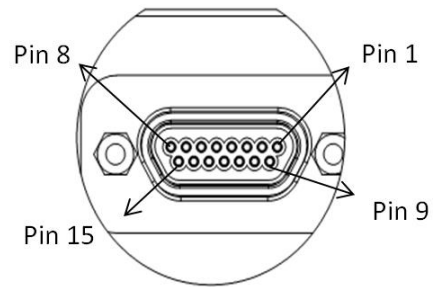
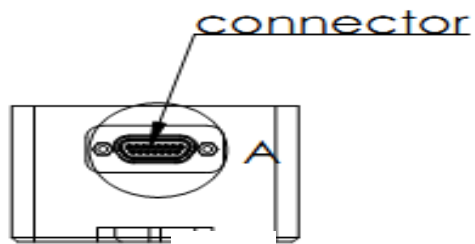
Optical	Unit	Lower Spec	Typical	Upper Spec
Wavelength	nm		1064	
Beam quality	M ²	1	1.3	1.7
Waist diameter	um	220	300	360
Waist location ²	mm		22	
Divergence (Full angle)	mrad	5.5	6.5	7.5
Beam location (From nominal)	mm		1	
Mode of operation		Pulsed		
Polarization		Random		
Output power ¹	mW	200	1000	1200
Pulse Repetition Frequency(PRF)	kHz	3	13.5	17
Pulse width	ns	14	18	22
Pulse energy	μJ	50	75	95
Peak power ³ at 1000mW	KW	3.5		5
Peak power at 450mW	KW	2.5		3.5
Power stability, 8hr	%		5	
Electrical				
Input voltage	VAC	100	220	240
Control interface		CAN serial communication, Digital control D-Sub		
Environment & Mechanical				
Laser head cooling type	-		Air cooled	
Operating temperature range	°C	35		45
Storage temperature range ⁴	°C	-20		70
Operating humidity range	%RH	20		80
Weight (head/driver)	g	370 / 2750		
Dimensions (head/driver)	mm	153 x 50 x 34.5 / 220 x 146 x 96		
¹ The output power can be varied via software ² Inside laser housing. Measured from output face. ³ Calculated by Peak power = Average power / (PRF x Pulse width) ⁴ Non condensing environment All typical values specified at 1000mW.				

Package Dimensions



Note: OEM versions can have output optics per customer requirement





Pin Definition

Pin1	TEC-
Pin2	
Pin3	
Pin4	Thermistor
Pin5	Thermistor
Pin6	LD+
Pin7	
Pin8	
Pin9	TEC+
Pin10	
Pin11	
Pin12	
Pin13	LD-
Pin14	
Pin15	