



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
- High pulse energy
- High peak power

Applications

- Marking
- Engraving
- Diamond Graphitization
- Biophotonics
- Lidar
- Remote sensing
- Instrumentation

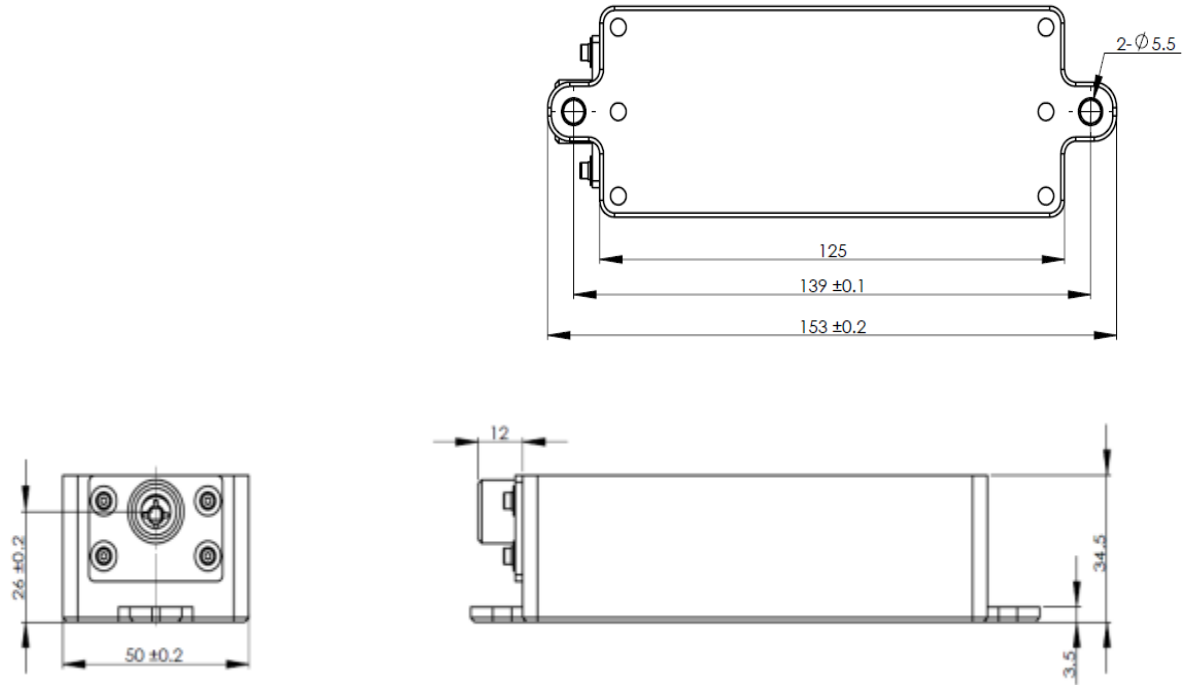
Proven Performance

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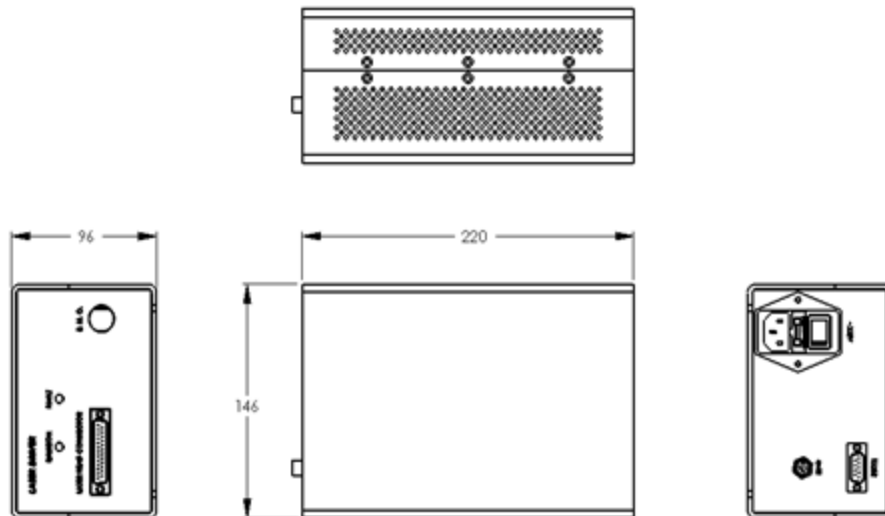
Typical Device Performance

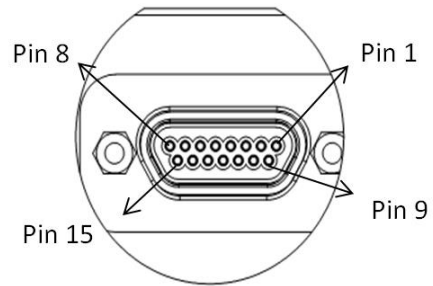
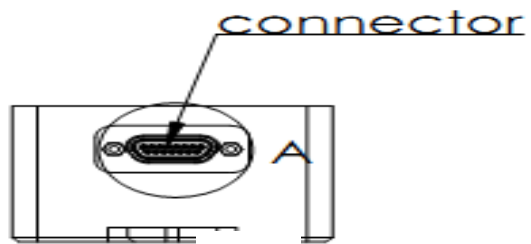
Laser Characteristics		Min.	Typical	Max.	Notes
Mode of operation		Constant Current Mode			
Peak power	kW	2.5	4.0	6.5	
Output power	mW	900	1000	1200	
Center wavelength	nm	1063	1064	1065	
Spectral width	nm			1	
Pulse width	Ns	14	18	22	
Rep rate	kHz	10	13.5	17	at 1000 mW
Pulse energy	(μ J)	55	75	95	at 1000 mW
Beam quality	M ²	1	1.5	1.8	at 1000 mW
Cooling Method					
Laser head cooling type	-		Air cooled		
Laser head base plate temperature	°C	15	25	40	
Cooling baseplate heat Dissipation / Removal Capacity	W		30	40	
Environmental					
Storage temperature	°C	-20 to +70			
Storage humidity range	%RH	5		90	
Ambient temperature range	°C	10	25	40	
Operating humidity range	%RH	20		80	
Appearance					
Safety Labels			Yes		IEC 60825-1
Housing Material	-	Aluminum			
Surface finish	-	Nickel plating			
Serial number	-	Laser marked			
Electrical					
Input voltage		100	220	240	

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	