Microlaser M20

nLIGHT's DPSS 1064nm Microlaser M20 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 M20 offers exceptional beam quality and high pulse energy from a compact package.

The Microlaser M20 is a brand new product that leads the industry in the cost-performance frontier by offering exceptional peak power and beam quality.

The passively Q-switched Microlaser M20 is specifically designed for ultra-low cost portable marking systems.

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

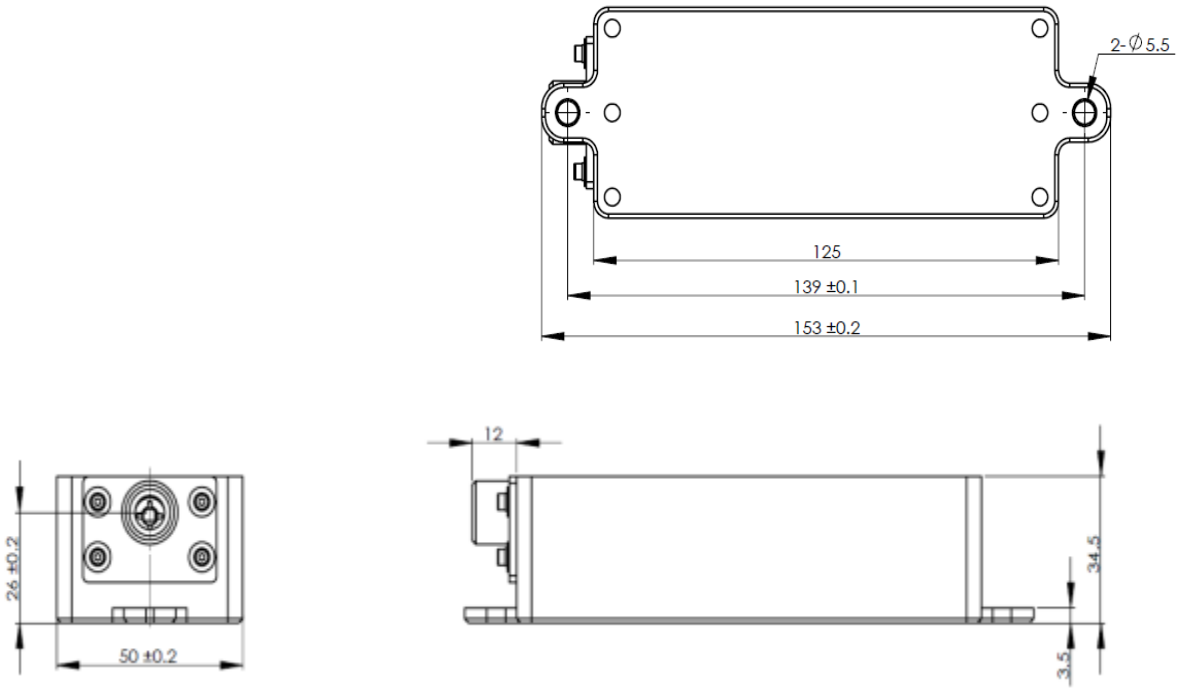
- Marking
- Engraving
- Graphitization
- Biophotonics
- Lidar
- Remote sensing
- Instrumentation

Proven Performance

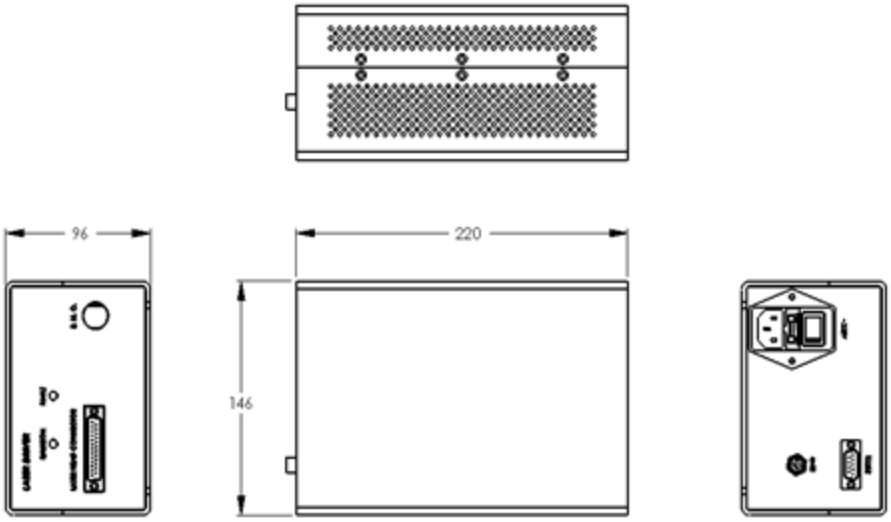
Typical Device Performance

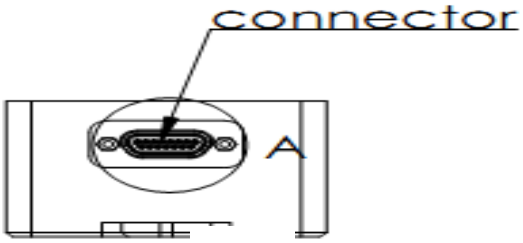
Laser Characteristics		Min.	Typical	Max.	Notes
Mode of operation			Constant Current Mode		
Peak power	kW		19		
Output power	mW	900	1000	1200	
Center wavelength	nm	1063	1064	1065	
Spectral widfth	nm			1	
Pulse width	Ns		9		
Rep rate	kHz		6		at 1000 mW
Pulse energy	(µJ)		166		at 1000 mW
Beam quality	M^2	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	

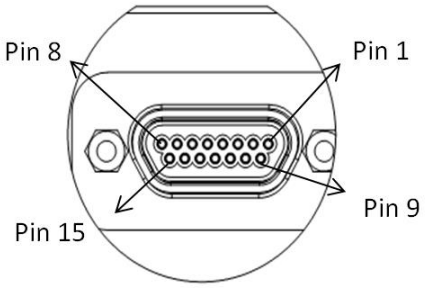
Package Dimensions



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	