

MCH Series 300ps SLM Microchip Laser



Applications

Seed laser
 Micromachining
 Raman spectroscopy
 Laser ranging
 Laser-induced fluorescence (LIF)
 Laser ultrasonic imaging
 Bio-photonics
 Photolithography

Key Features

- ◆ Pulse width down to 300ps
- ◆ High energy stability
- ◆ Repetition rate up to 100kHz
- ◆ Spatial mode TEM₀₀
- ◆ Polarization-stable

Technical Specifications

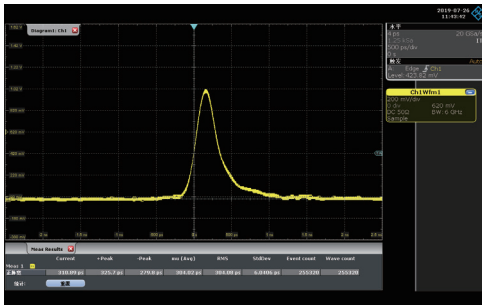
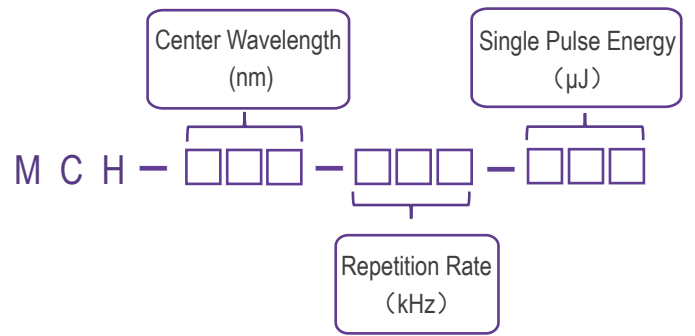
Optical Parameters					
Wavelength (nm)	1064			532	
Repetition rate (kHz)	20	50	100	20	50
Average power (mW)	60	100	100	30	50
Pulse energy (μJ)	3	2	1	1.5	1
Pulse width (ps)	350		500	300	
Power stability (8h)	±3%				
Beam profile	TEM ₀₀				
Beam full divergence (typ., mrad)	Horizontal @1/e ²	25		16	
	Vertical @1/e ²	25		16	
Polarization ratio	>100:1				
System Parameters					
Supply power voltage	100-240 VAC, 50/60 Hz				
Control interface	RS232, USB				
Power consumption (W)	≤35	≤40	≤40	≤35	≤40
Power dimensions (W×H×L, mm)	168×88×140				
Laser head dimensions (W×H×L, mm)	45×33×120				
Operation temperature (°C)	15-35				
Storage temperature (°C)	0-60				

1. Wavelengths of 355nm and 266nm are available upon request.
2. Other repetition rates can be customized.
3. As products are constantly being updated, the right of final interpretation of technical specifications or illustrations in datasheet belongs to Reallight.

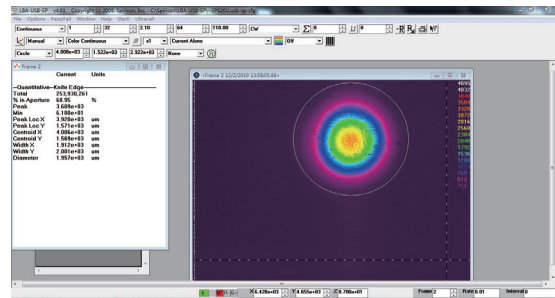
Order Information

Wavelength (nm)	Part Number	Repetition rate (kHz)	Pulse energy (μJ)
1064	MCH-1064-20-003	20	3
	MCH-1064-50-002	50	2
	MCH-1064-100-001	100	1
532	MCH-532-20-1.5	20	1.5
	MCH-532-50-001	50	1

Part Numbering Schema

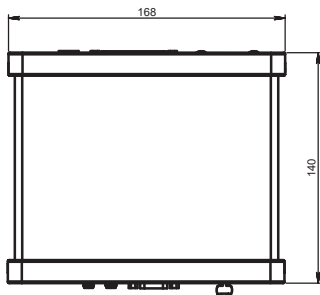
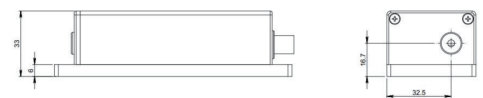
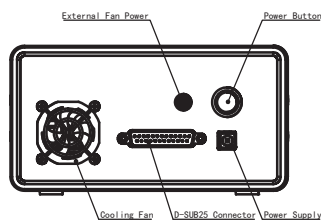
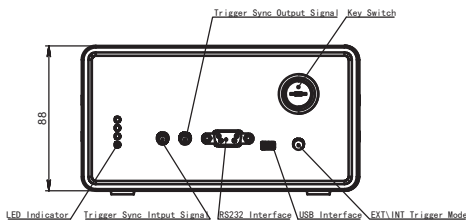


Typical Pulse

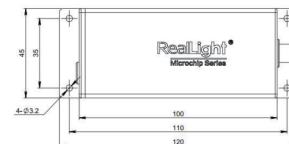


Beam Profile

Mechanical Drawings (in mm)



Power Supply



Laser Head

