



# MCH Series 300ps SLM Microchip Laser



## Key Features

- ◆ Pulse width down to 300ps
- ◆ High energy stability
- ◆ Repetition rate up to 100kHz
- ◆ Spatial mode TEM<sub>00</sub>
- ◆ Polarization-stable

## Applications

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

## Technical Specifications

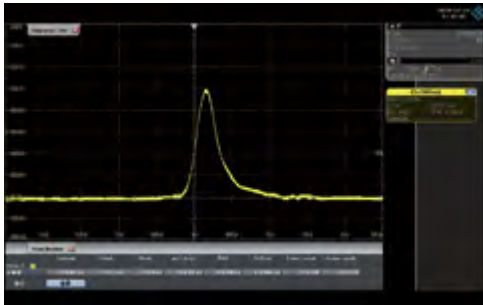
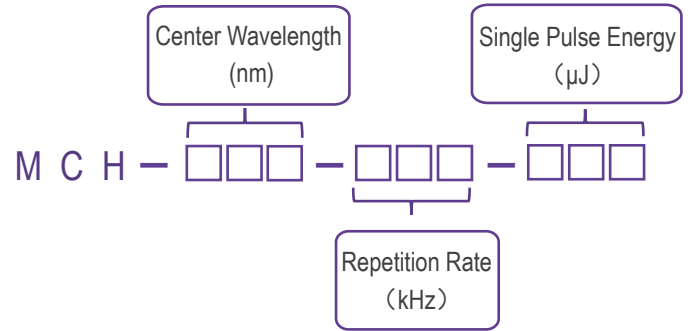
Optical Parameters						
Wavelength (nm)	1064			532		
Repetition rate (kHz)	20	50	100	20	50	100
Average power (mW)	60	100	100	30	50	30
Pulse energy (μJ)	3	2	1	1.5	1	0.3
Pulse width (ps)	350		500	300		450
Power stability (8h)	±3%					
Beam profile	TEM <sub>00</sub>					
Beam full divergence (typ., mrad)	Horizontal @1/e <sup>2</sup>	20	30	16	25	
	Vertical @1/e <sup>2</sup>	20	30	16	25	
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	≤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.

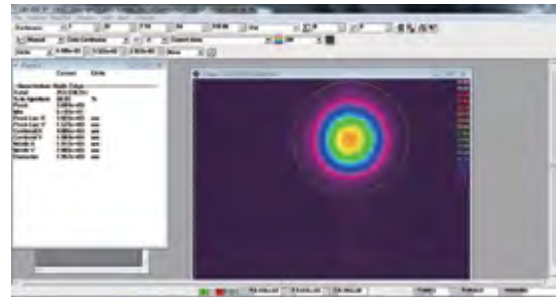
## Order Information

Wavelength (nm)	Part Number	Repetition rate (kHz)	Pulse energy ( $\mu\text{J}$ )
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
	MCH-532-100-0.3	100	0.3

## Part Numbering Schema

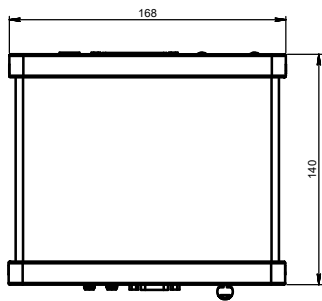
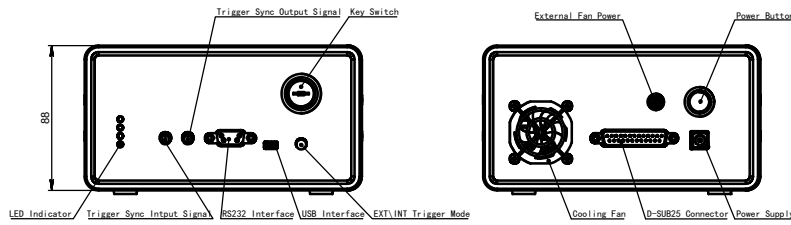


Typical Pulse

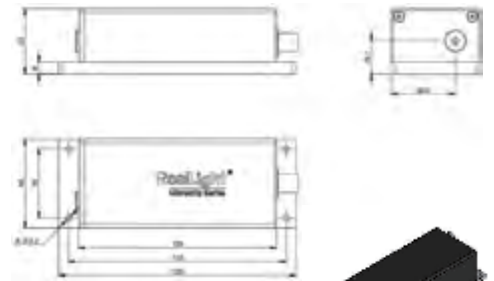


Beam Profile

## Mechanical Drawings (in mm)



Power Supply



Laser Head

