



# MCJ Series 1ns Microchip Laser



## Key Features

- ◆ Pulse width down to 1ns
- ◆ Single pulse energy up to 100µJ
- ◆ Repetition rate up to 2kHz
- ◆ Spatial mode TEM<sub>00</sub>

## Applications

- Material micromachining
- Spectrum analysis
- LIDAR
- Pump source
- Biomedicine

## Technical Specifications

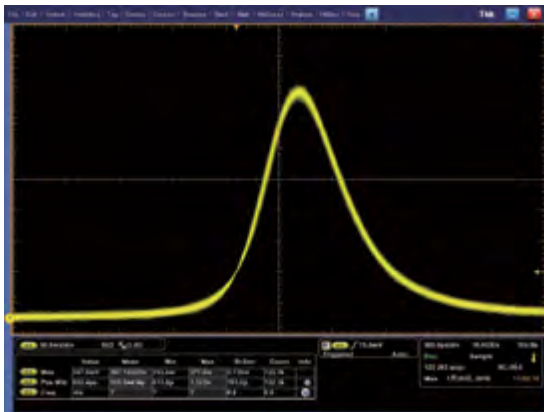
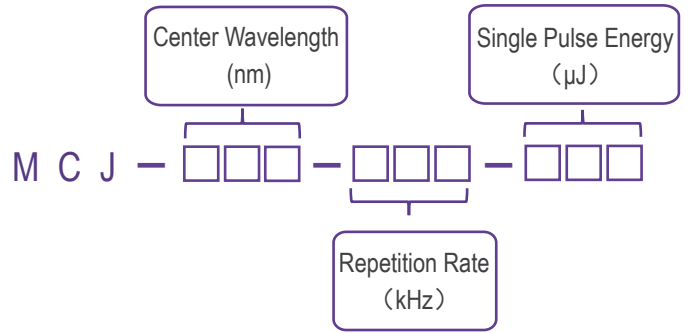
Optical Parameters										
Wavelength (nm)	1030		515		343			257		
Repetition rate (kHz)	1	2	1	2	0.2*	1*	2*	1*	2*	
Average power (mW)	100	160	40	60	6	20	30	8	10	
Pulse energy (µJ)	100	80	40	30	30	20	15	8	5	
Pulse width (ps)	1000		900		800			800		
Power stability (8h)	±3%									
Beam profile	TEM <sub>00</sub>									
Beam full divergence (typ., mrad)	Horizontal @1/e <sup>2</sup>	6	8	4	5	3	3	4	2	3
	Vertical @1/e <sup>2</sup>	6	8	4	5	3	3	4	2	3
Polarization ratio	>100:1									
System Parameters										
Supply power voltage	100-240 VAC, 50/60 Hz									
Control interface	RS232, USB									
Power consumption (W)	≤15	≤25	≤15	≤25	≤15	≤15	≤25	≤15	≤25	
Power dimensions (W×H×L,mm)	168×88×140									
Laser head dimensions (W×H×L,mm)	45×30×120									
Operation temperature (°C)	15-35									
Storage temperature (°C)	0-60									

- \*Laser head features side laser outlet, please see mechanical drawings for more details.
- Built-in beam expander and collimator are available upon request, and divergence can be less than 2mrad.

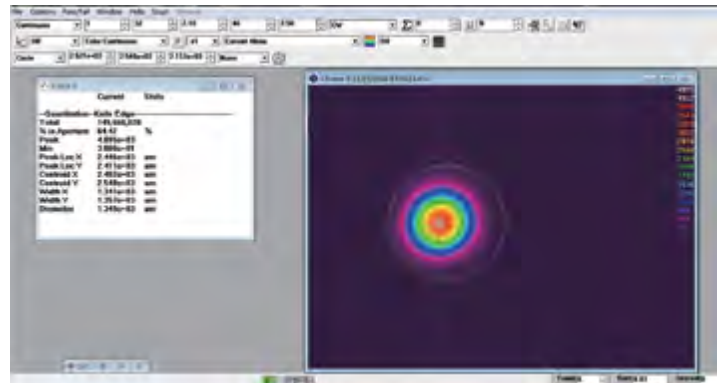
## Order Information

Wavelength (nm)	Part Number	Repetition rate (kHz)	Pulse energy (μJ)
1030	MCJ-1030-1-100	1	100
	MCJ-1030-2-80	2	80
515	MCJ-515-1-040	1	40
	MCJ-515-2-030	2	30
343	MCJ-343-0.2-030	0.2	30
	MCJ-343-1-020	1	20
	MCJ-343-2-015	2	15
257	MCJ-257-1-008	1	8
	MCJ-257-2-005	2	5

## Part Numbering Schema

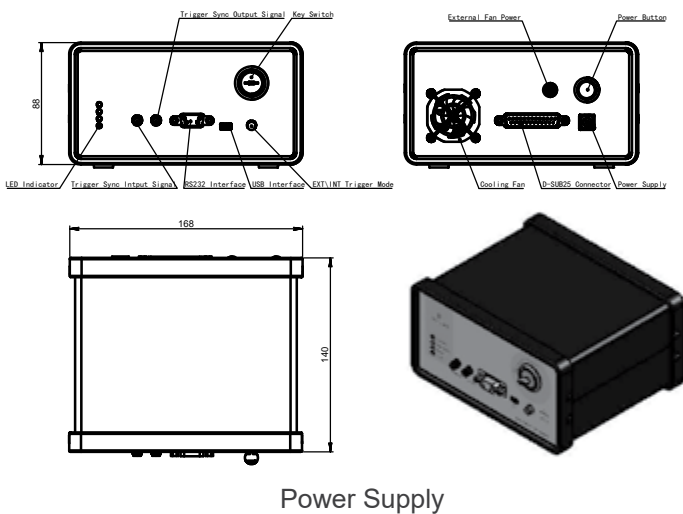


Typical Pulse

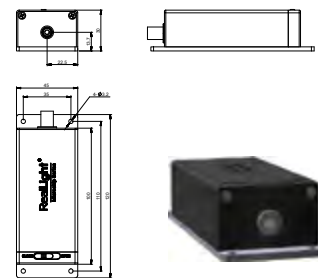


Beam Profile

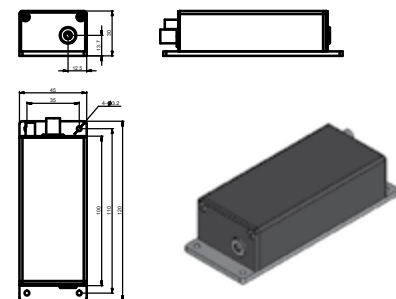
## Mechanical Drawings (in mm)



Power Supply



Laser Head (middle laser outlet)



Laser Head (side laser outlet)

