



MCC Series 750ps Microchip Laser

Applications

Seed laser
Micromachining
Pump source for optical parametric oscillators
Laser-induced breakdown spectroscopy (LIBS)
Laser-based ultrasound detection
Laser ionization mass spectroscopy (LIMS)
Laser ranging
Laser-induced fluorescence (LIF)
Laser ultrasonic imaging
Laser ablation
Nonlinear optical measurement

Key Features

- ◆ Single pulse energy up to 100μJ
- ◆ Repetition rate up to 30kHz
- ◆ Spatial mode TEM₀₀
- ◆ Polarization-stable
- ◆ A wide range of wavelengths

Technical Specifications

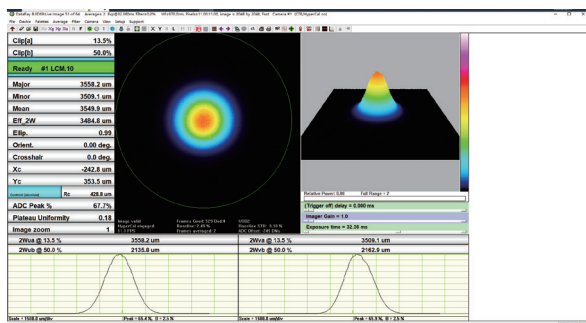
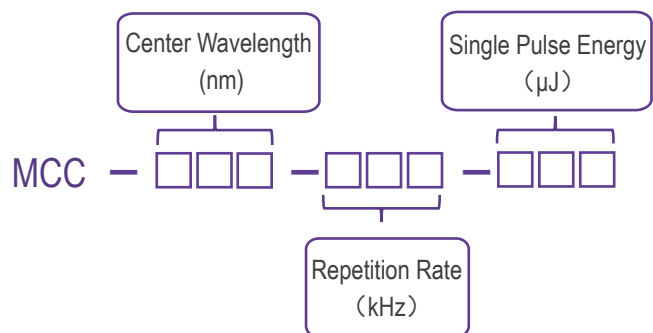
Optical Parameters																			
Wavelength (nm)		1064				532				355				266					213
Repetition rate (kHz)		1	5	10	20	1	5	10	20	1*	5*	10*	20*	1*	5*	10*	20*	30*	1*
Average power (mW)		100	300	300	400	50	150	150	200	20	50	50	60	10	40	40	40	60	4
Pulse energy (μJ)		100	60	30	20	50	30	15	10	20	10	5	3	10	8	4	2	2	4
Pulse width (ps)		750	750	750	700	750	750	750	600	650	650	650	600	650	650	650	600	900	650
Power stability (RMS, @8h)		<3%																	
Beam profile		TEM ₀₀																	
Beam full divergence (typ., mrad)	Horizontal @1/e ²	8	12	12	12	7	10	10	11	5	8	8	10	5	8	8	11	12	5
	Vertical @1/e ²	8	12	12	12	7	10	10	11	5	8	8	11	5	8	8	10	11	5
Polarization ratio		>100:1																	
System Parameters																			
Supply power voltage		100~240 VAC, 50/60 Hz																	
Control interface		RS232																	
Power consumption (W)		≤45																	
Power dimensions (W×H×L,mm)		180×102×180																	
Laser dimensions (W×H×L,mm)		45×33×120																	
Operation temperature (°C)		15~35																	
Storage temperature (°C)		0~60																	

1. *Side laser outlet configuration (middle laser outlet configuration unless otherwise stated) .
2. Built-in beam expander and collimator are available upon request, and divergence can be less than 2mrad.
3. All the data in the above table are the typical values obtained from the tests at room temperature of 25°C, and the final data is subject to the final test report.

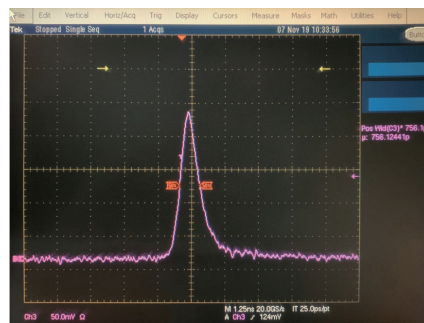
Order Information

Wavelength (nm)	Part Number	Repetition rate (kHz)	Pulse energy (μJ)
1064	MCC-1064-1-100	1	100
	MCC-1064-5-60	5	60
	MCC-1064-10-30	10	30
	MCC-1064-20-20	20	20
532	MCC-532-1-50	1	50
	MCC-532-5-30	5	30
	MCC-532-10-15	10	15
355	MCC-355-1-20	1	20
	MCC-355-5-10	5	10
	MCC-355-10-5	10	5
	MCC-355-20-3	20	3
266	MCC-266-1-10	1	10
	MCC-266-5-8	5	8
	MCC-266-10-4	10	4
	MCC-266-20-2	20	2
	MCC-266-30-2	30	2
213	MCC-213-1-4	1	4

Part Numbering Schema

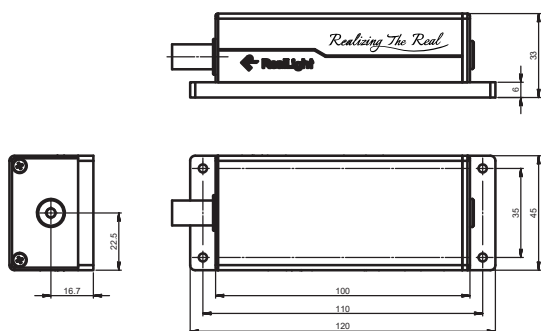


Beam Profile (1064nm)

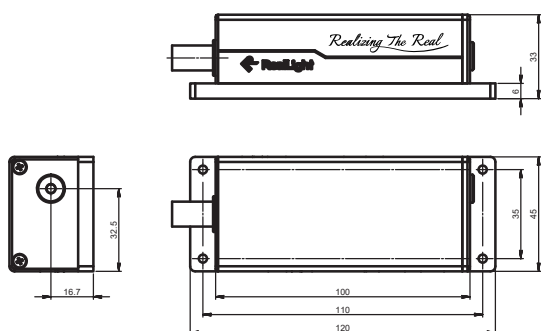


Typical Pulse

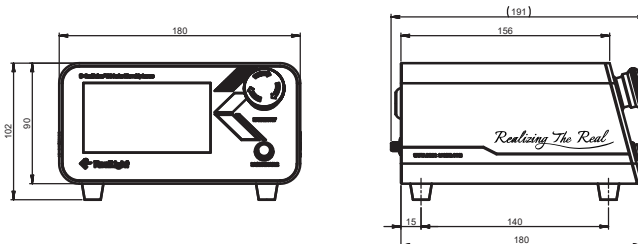
Mechanical Drawings (in mm)



Laser Head (middle laser outlet)



Laser Head (side laser outlet)



Power Supply

