

MCH Series 300ps SLM Microchip Laser



Key Features

- ◆ Pulse width down to 350ps
- ◆ High energy stability
- ◆ Repetition rate up to 100kHz
- ◆ Spatial mode TEM₀₀
- ◆ Polarization-stable

Applications

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

Technical Specifications

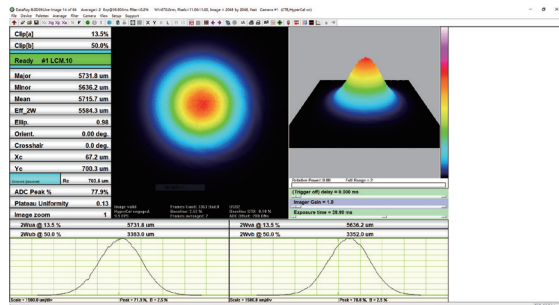
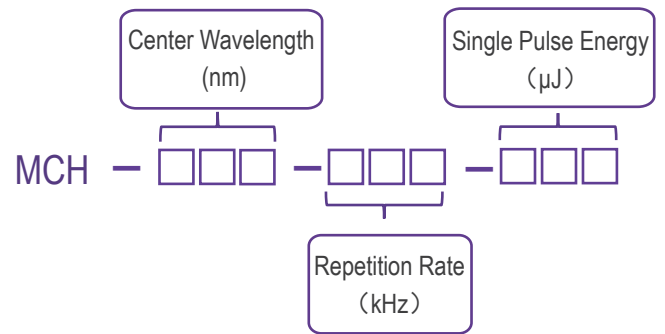
Optical Parameters															
Wavelength（nm）		1064				532				355			266		
Repetition rate（kHz）		20	40	50	100	20	40	50	100	20	40	100	20	40	100
Average power（mW）		60	80	100	100	30	40	50	50	10	12	15	8	8	12
Pulse energy（μJ）		3	2	2	1	1.5	1	1	0.5	0.5	0.3	0.15	0.4	0.2	0.12
Pulse width（ps）		400	400	350	600	350	350	300	500	350	350	500	350	350	500
Power stability（RMS，@8h）		<3%													
Beam profile		TEM ₀₀													
Beam full divergence （typ., mrad）	Horizontal @1/e ²	22	22	30	24	18	18	16	20	16	16	18	18	18	20
	Vertical @1/e ²	22	22	30	24	18	18	16	20	18	18	20	16	16	18
Polarization ratio		>100:1													
System Parameters															
Supply power voltage		100~240 VAC, 50/60 Hz													
Control interface		RS232													
Power consumption（W）		≤35	≤40	≤40	≤40	≤35	≤40	≤40	≤40	≤40	≤40	≤40	≤40	≤40	≤40
Power dimensions（W×H×L,mm）		150×54×105													
Laser head dimensions（W×H×L,mm）		45×33×120													
Operation temperature（℃）		15~35													
Storage temperature（℃）		0~60													

1. Other repetition rates can be customized.
2. 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.

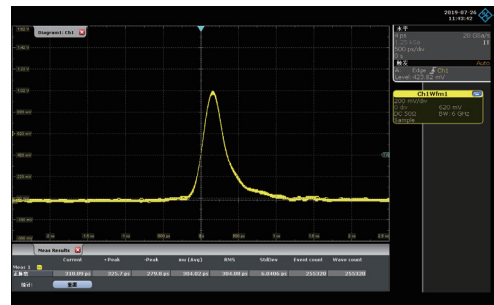
Order Information

Wavelength (nm)	Part Number	Repetition rate (kHz)	Pulse energy (μJ)
1064	MCH-1064-20-3	20	3
	MCH-1064-40-2	40	2
	MCH-1064-50-2	50	2
	MCH-1064-100-1	100	1
532	MCH-532-20-1.5	20	1.5
	MCH-532-40-1	40	1
	MCH-532-50-1	50	1
	MCH-532-100-0.5	100	0.5
355	MCH-355-20-0.5	20	0.5
	MCH-355-40-0.3	40	0.3
	MCH-355-100-0.15	100	0.15
266	MCH-266-20-0.4	20	0.4
	MCH-266-40-0.2	40	0.2
	MCH-266-100-0.12	100	0.12

Part Numbering Schema

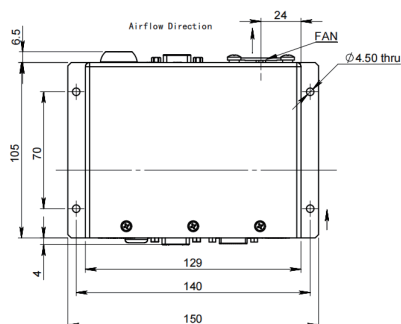
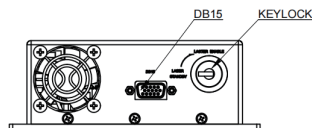
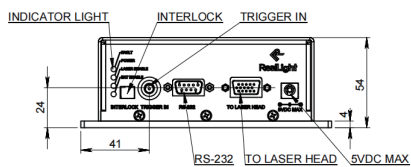


Beam Profile (1064nm)

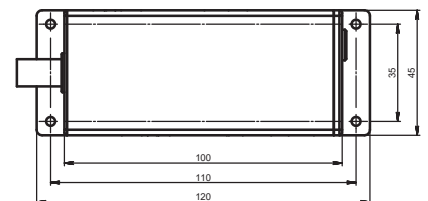
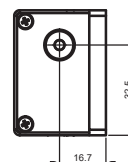


Typical Pulse

Mechanical Drawings (in mm)



Power Supply



Laser Head

