



RealLight

# MCA Series 2ns Microchip Lasers



## Key Features

- ◆ Pulse width down to 1.5ns
- ◆ Pulse energy up to 200μJ
- ◆ Pulse energy up to 1.2mJ with external diode pumping
- ◆ Repetition rates up to 20kHz
- ◆ Excellent beam quality
- ◆ Sealed design, high reliability

## Applications

LIDAR	Laser Ranging	Laser Induced Fluorescence
LIPS	Air Monitoring	Laser Ultrasound Testing
LIBS	Optical Metrology	OPO Pumping Source
LIMS	Raman Spectroscopy	3D Scanning and Imaging
Biomedical		

MCA Series																											
Wavelength ( nm )		1064						532						355						266							
Repetition rate ( kHz )		0.1	0.1*	1	2.5	5	10	20	0.1	0.1*	1	2.5	5	10	20	0.1	0.1*	1	5	10	20	0.1	0.1*	1	5	10	20
Average power ( mW )		20	120	150	325	250	350	700	6	36	50	150	100	150	300	4	24	30	50	70	140	1	6	8	10	15	30
Pulse energy ( μJ )		200	1200	150	130	50	35	35	60	360	50	40	20	15	15	40	240	30	10	7	7	10	60	8	2	1.5	1.5
Pulse width ( ns )		2			1.5			2			1.5			2			1.5			2			1.5				
Power stability ( 8h )		±3%						±3%						±3%						±3%							
Beam profile		TEM <sub>00</sub>						TEM <sub>00</sub>						TEM <sub>00</sub>						TEM <sub>00</sub>							
Beam divergence full angle Typ. ( mrad )	Horizontal @1/e <sup>2</sup>	<4	<6	<10	<2	<4	<6	<3	<5	<2	<4	<6	<3	<5	<2	<4											
	Vertical @1/e <sup>2</sup>	<4	<6	<10	<2	<4	<6	<3	<5	<2	<4	<6	<3	<5	<2	<4											
Polarization		>100:1						>100:1						>100:1						>100:1							
System Parameters																											
Supply power voltage		100-240 VAC,50/60 Hz																									
Modulation input		TTL 0-5V, SMA input																									
Control interface		RS232、USB																									
Power consumption ( W )		<15	<15	<15	<20	<25	<30	<35	<10	<15	<15	<25	<25	<30	<35	<15	<15	<20	<25	<30	<35	<15	<15	<20	<25	<30	<35
Power dimensions ( W×H×L,mm )		150×76×146/150×76×200*																									
Laser head dimensions ( W×H×L,mm )		45×30×120																									
Operation temperature ( °C )		15-35																									
Storage temperature ( °C )		0-60																									

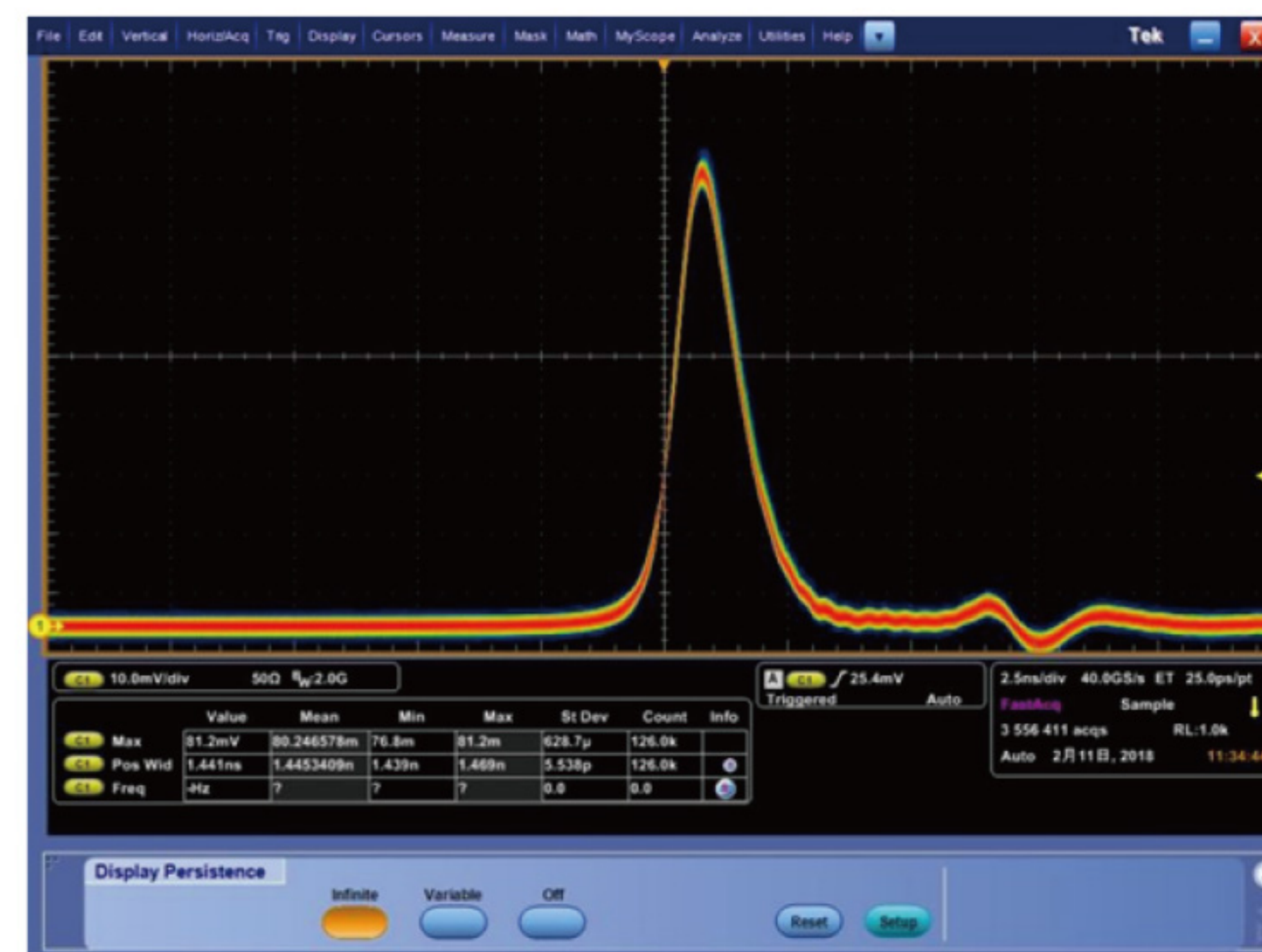
\*External diode pumping, power supply and laser head are non-detachable. Power supply size:150×76×200cm  
All specifications are subject to change without prior notice



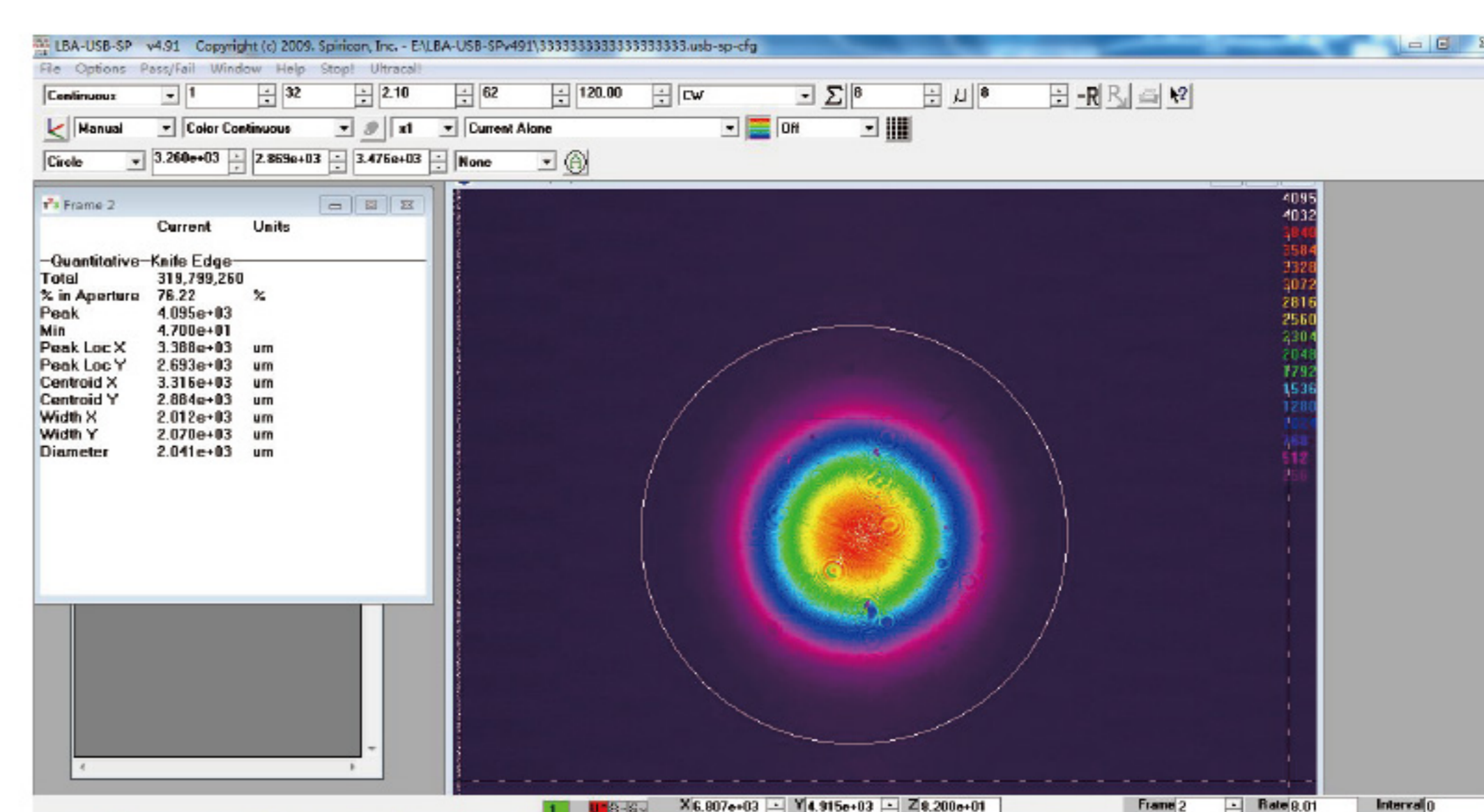


## Ordering information

MCA Series Model List			
Wavelength ( nm )	Part Number	Repetition rate ( kHz )	Pulse energy ( $\mu$ J )
1064	MCA-1064-0.1-200	0.1	200
	MCA-1064-0.1-1200	0.1	1200
	MCA-1064-1-150	1	150
	MCA-1064-2.5-130	2.5	130
	MCA-1064-5-050	5	50
	MCA-1064-10-035	10	35
	MCA-1064-20-035	20	35
532	MCA-532-0.1-060	0.1	60
	MCA-532-0.1-360	0.1	360
	MCA-532-1-050	1	50
	MCA-532-2.5-040	2.5	40
	MCA-532-5-020	5	20
	MCA-532-10-015	10	15
	MCA-532-20-015	20	15
355	MCA-355-0.1-040	0.1	40
	MCA-355-0.1-240	0.1	240
	MCA-355-1-030	1	30
	MCA-355-5-010	5	10
	MCA-355-10-007	10	7
	MCA-355-20-007	20	7
	266	MCA-266-0.1-010	0.1
MCA-266-0.1-060		0.1	60
MCA-266-1-008		1	8
MCA-266-5-002		5	2
MCA-266-10-1.5		10	1.5
MCA-266-20-1.5		20	1.5



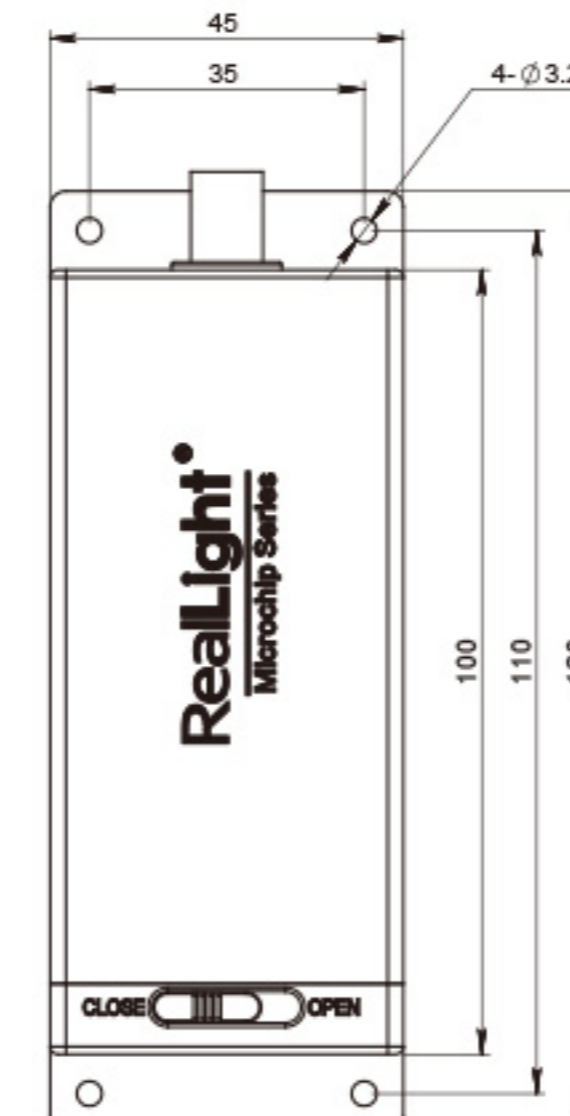
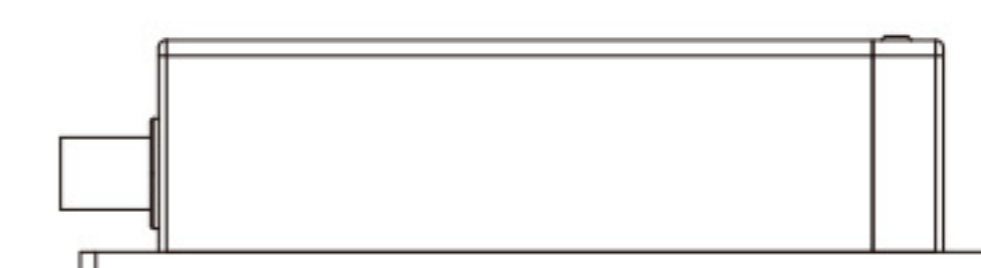
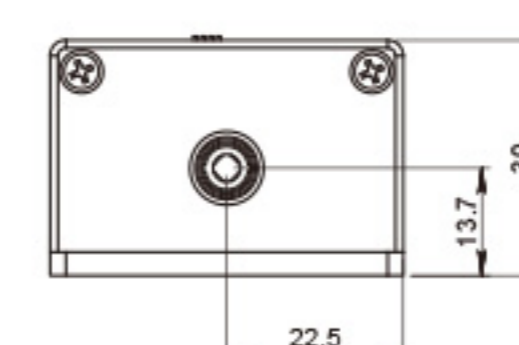
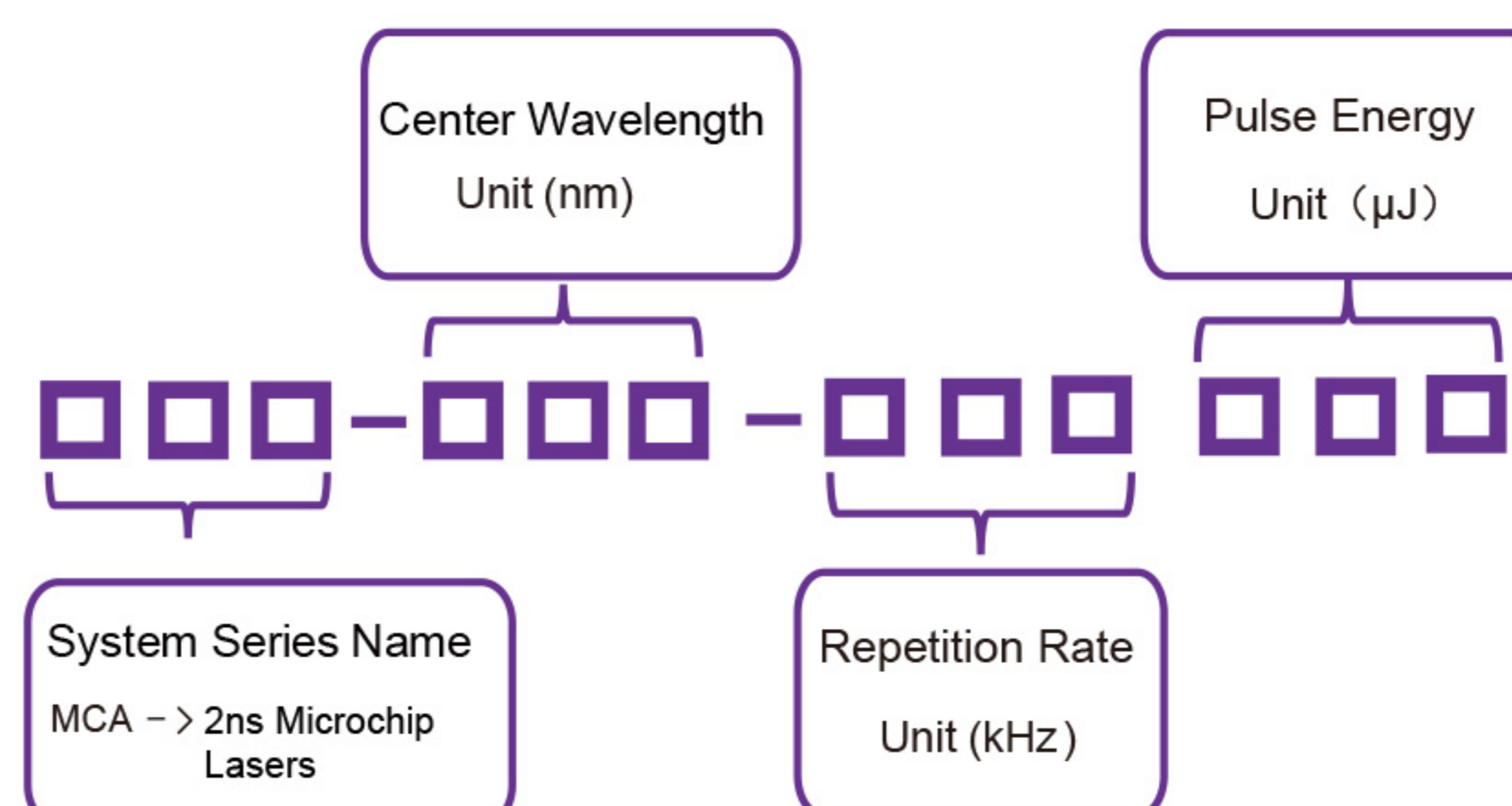
Typical Pulse



Beam Profile

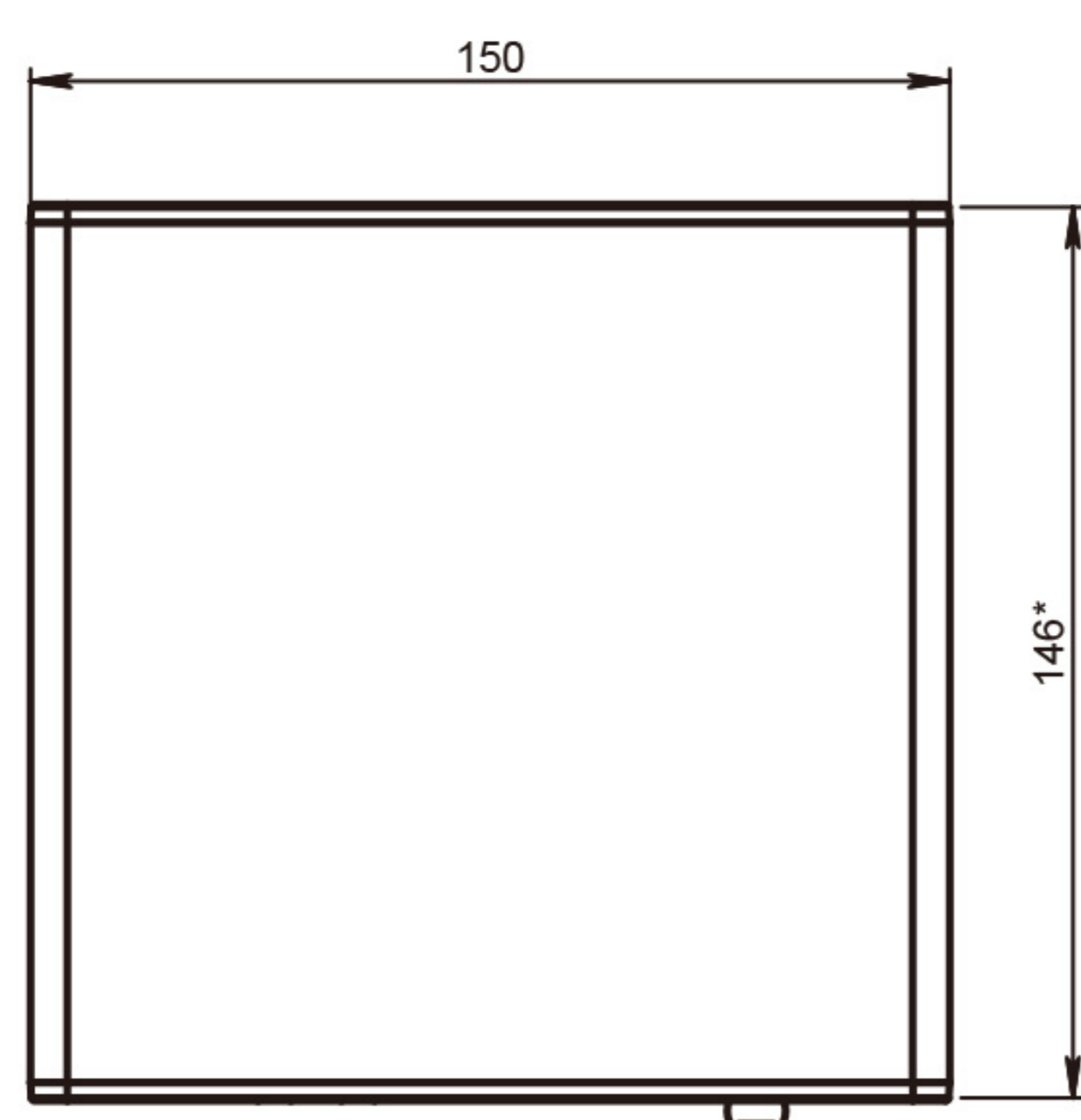
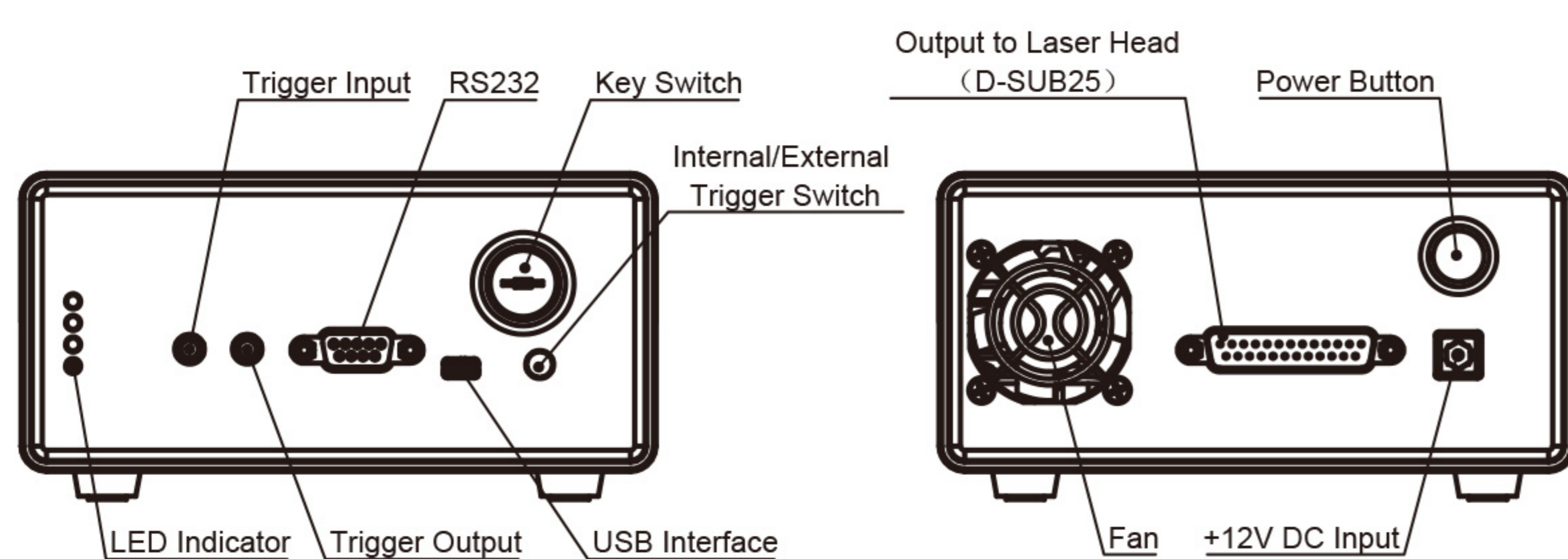
## Part numbering schema

### Part numbering schema



Unit: mm

## Mechanical Specifications



\*External diode pumping, length of power supply: 200mm