

# MCB Series 550ps Microchip Lasers



## Key Features

- ◆ Pulse width down to 500ps
- ◆ Pulse energy up to 170μJ
- ◆ Pulse energy up to 360μJ with external diode pumping
- ◆ Repetition rates up to 1kHz
- ◆ Excellent beam quality
- ◆ Sealed design, high reliability

## Applications

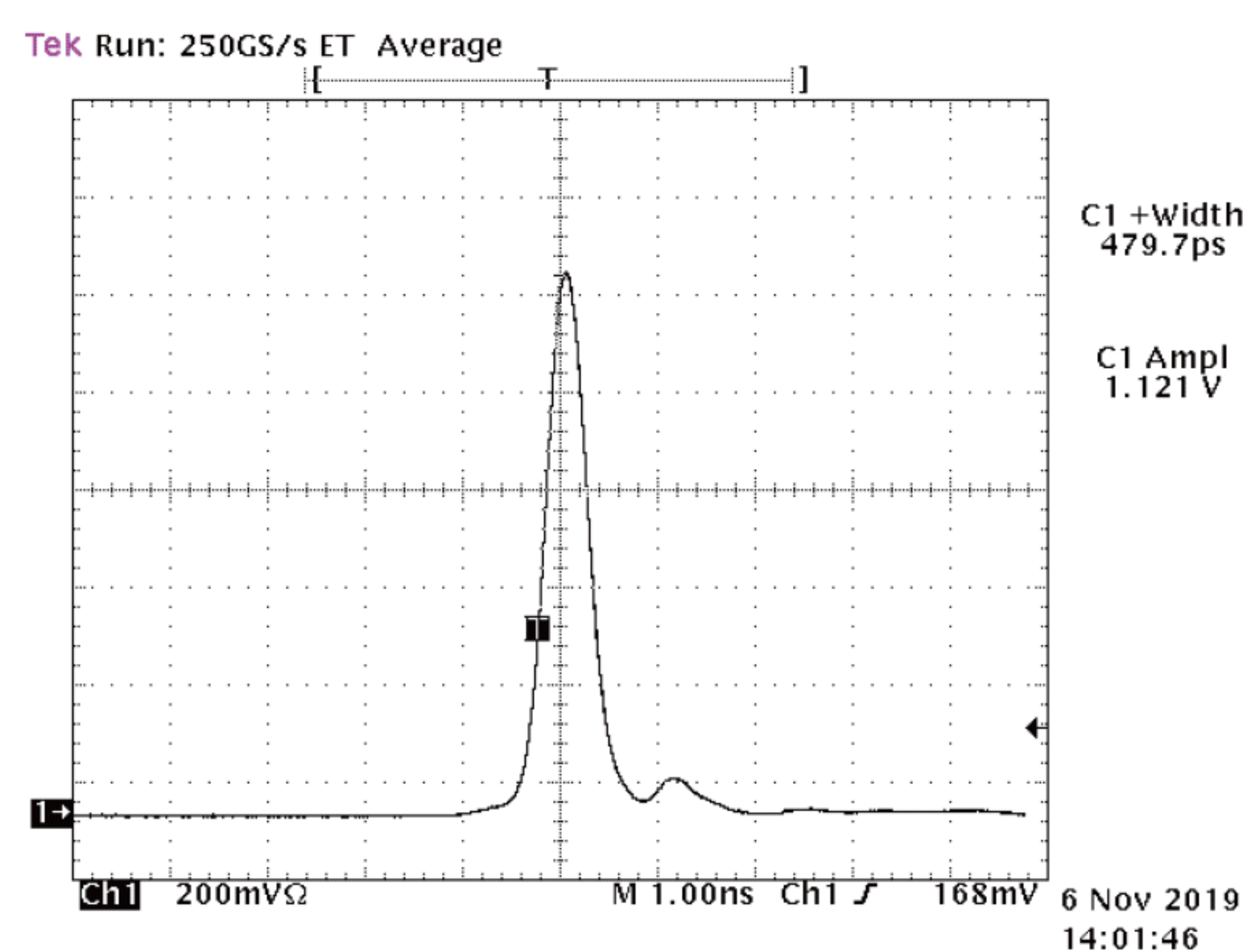
LIBS  
LIPS  
LIMS  
Seed Laser  
Biomedical  
Micromachining  
OPO Pumping Source  
Laser Ultrasound Testing  
Laser Induced Fluorescence  
Nonlinear Optical Measurement

MCB Series												
Wavelength ( nm )	1064			532			355			266		
Repetition rate ( kHz )	0.1	0.1*	1	0.1	0.1*	1	0.1	0.1*	1	0.1	0.1*	1
Average power ( mW )	17	36	130	8	18	70	3.5	7	25	1	2	8
Pulse energy ( μJ )	170	360	130	80	180	70	35	70	25	10	20	8
Pulse width ( ps )	550			500			500			500		
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>		<5	<8	<3	<5	<2	<4	<2	<3	<2	<3
	Vertical @1/e <sup>2</sup>		<5	<8	<3	<5	<2	<4	<2	<3	<2	<3
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	<25	<20	<15	<30	<25	<15	<35	<30	<15	<40
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											

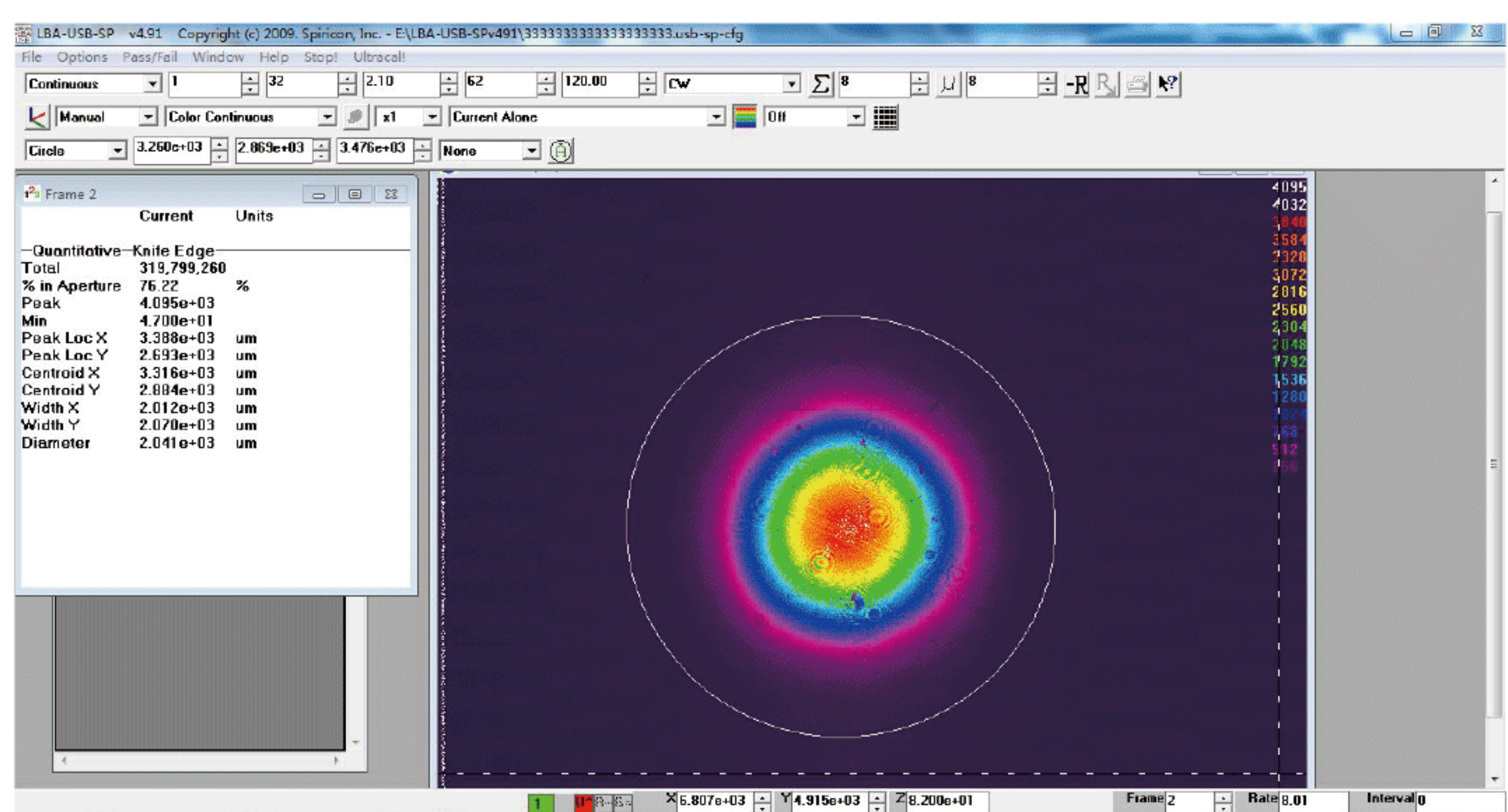
\*External diode pumping, power supply and laser head are non-detachable.

Power supply size:150×76×200cm

All specifications are subject to change without prior notice



Typical Pulse

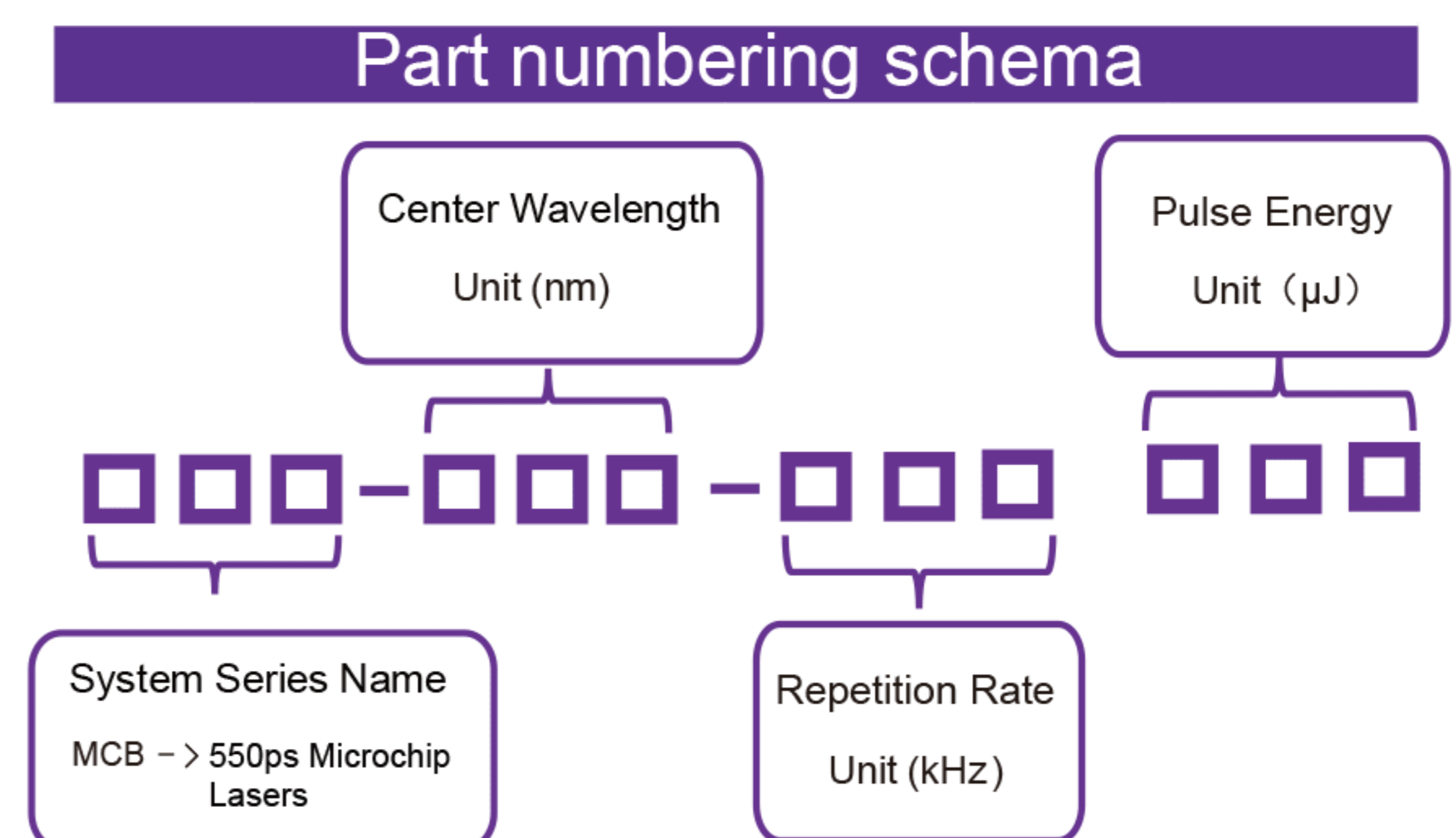


Beam Profile

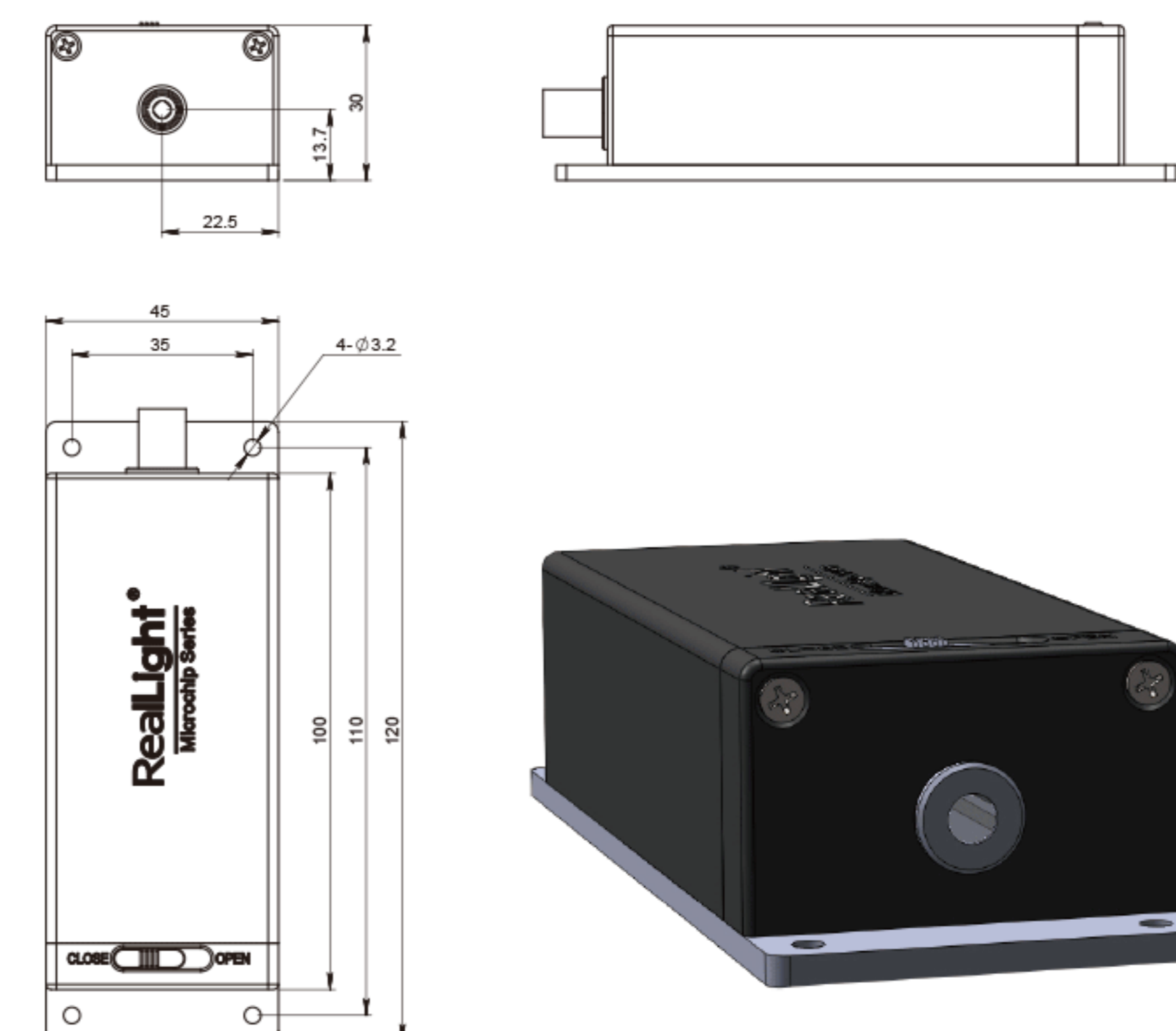
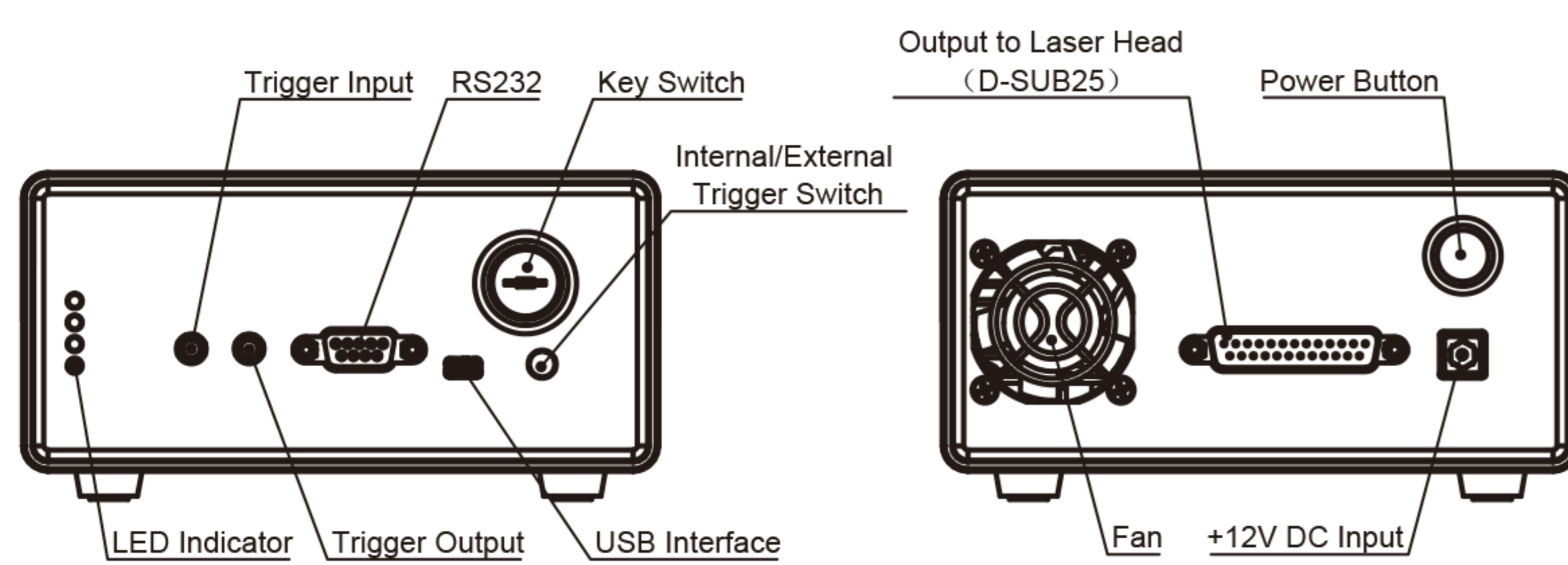
## Ordering information

MCB Series Model List			
Wavelength ( nm )	Part Number	Repetition rate ( kHz )	Pulse energy ( $\mu$ J )
1064	MCB-1064-0.1-170	0.1	170
	MCB-1064-0.1-181	0.1	360
	MCB-1064-1-130	1	130
532	MCB-532-0.1-080	0.1	80
	MCB-532-0.1-180	0.1	180
	MCB-532-1-070	1	70
355	MCB-355-0.1-035	0.1	35
	MCB-355-0.1-070	0.1	70
	MCB-355-0.1-025	1	25
266	MCB-266-0.1-010	0.1	10
	MCB-266-0.1-020	0.1	20
	MCB-266-0.1-008	1	8

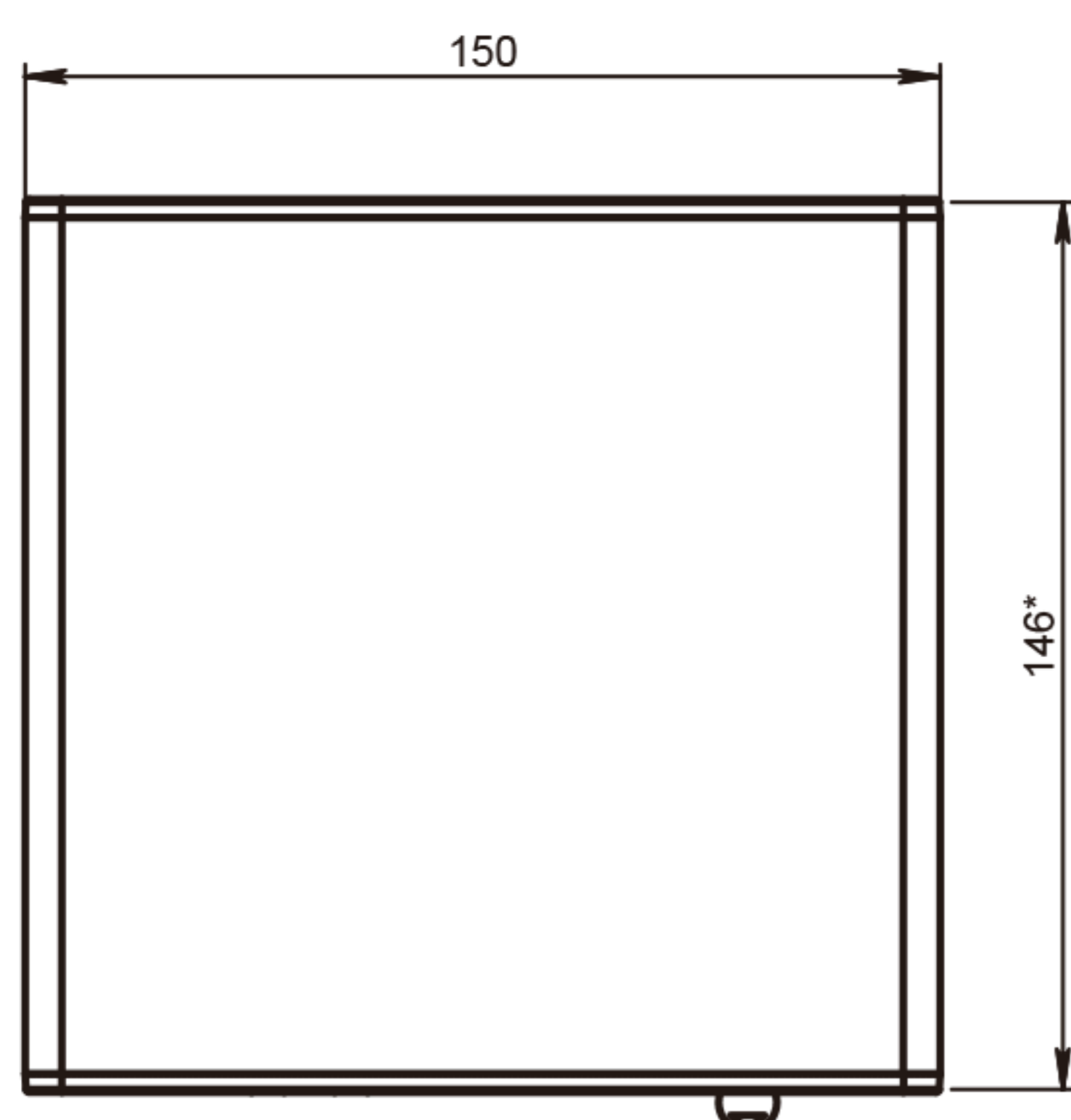
## Part numbering schema



## Mechanical Specifications



Unit: mm



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