



RealLight

MCD Series 350ps Microchip Lasers



Key Features

- ◆ Pulse width down to 300ps
- ◆ Pulse energy up to 150μJ
- ◆ Pulse energy up to 500μJ with external diode pumping
- ◆ Repetition rates up to 1kHz
- ◆ Excellent beam quality
- ◆ Sealed design, high reliability

Applications

LIMS
Seed Laser
Laser Micromachining

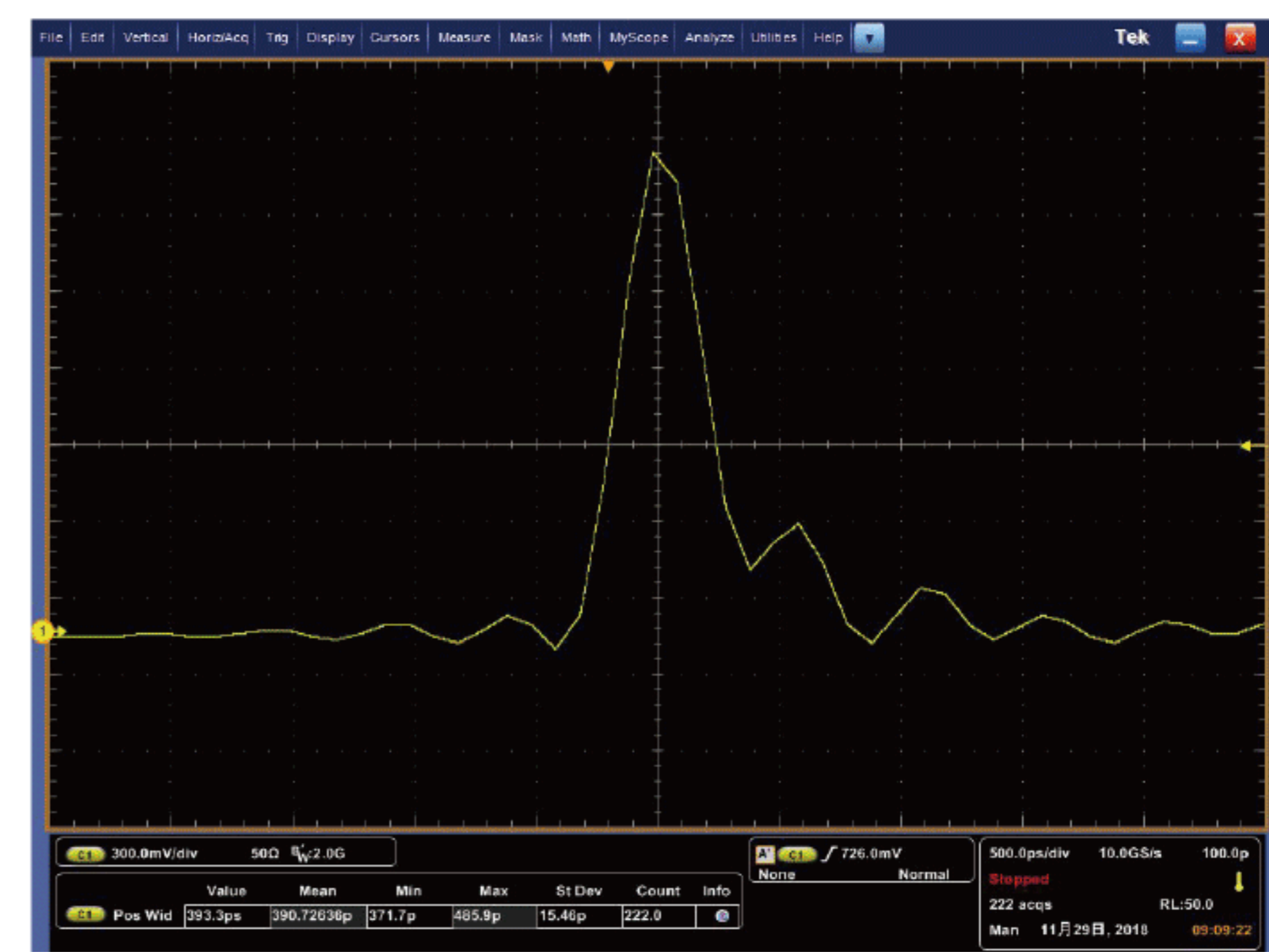
Laser Induced Fluorescence
Nonlinear Optical Measurement
Flourescence Lifetime Measurement

MCD Series																	
Wavelength (nm)		1064				532				355				266			
Repetition rate (kHz)		0.1	0.1*	0.5	1	0.1	0.1*	0.5	1	0.1	0.1*	0.5	1	0.1	0.1*	0.5	1
Average power (mW)		15	50	65	100	7.5	25	32	50	3	10	12	20	1	3	7	5
Pulse energy (μJ)		150	500	130	100	75	250	65	50	30	100	25	20	10	30	7	5
Pulse width (ps)		350				300				300				300			
Power stability (8h)		±3%				±3%				±3%				±3%			
Beam profile		TEM ₀₀				TEM ₀₀				TEM ₀₀				TEM ₀₀			
Beam divergence full angle Typ.(mrad)	Horizontal @1/e ²	<5	<9	<3	<6	<3	<6	<3	<4	<2	<3	<2	<3				
	Vertical @1/e ²	<5	<9	<3	<6	<3	<6	<3	<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	<20	<20	<20	<15	<20	<25	<20	<15	<20	<25	<20	<15	<20	<25
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															

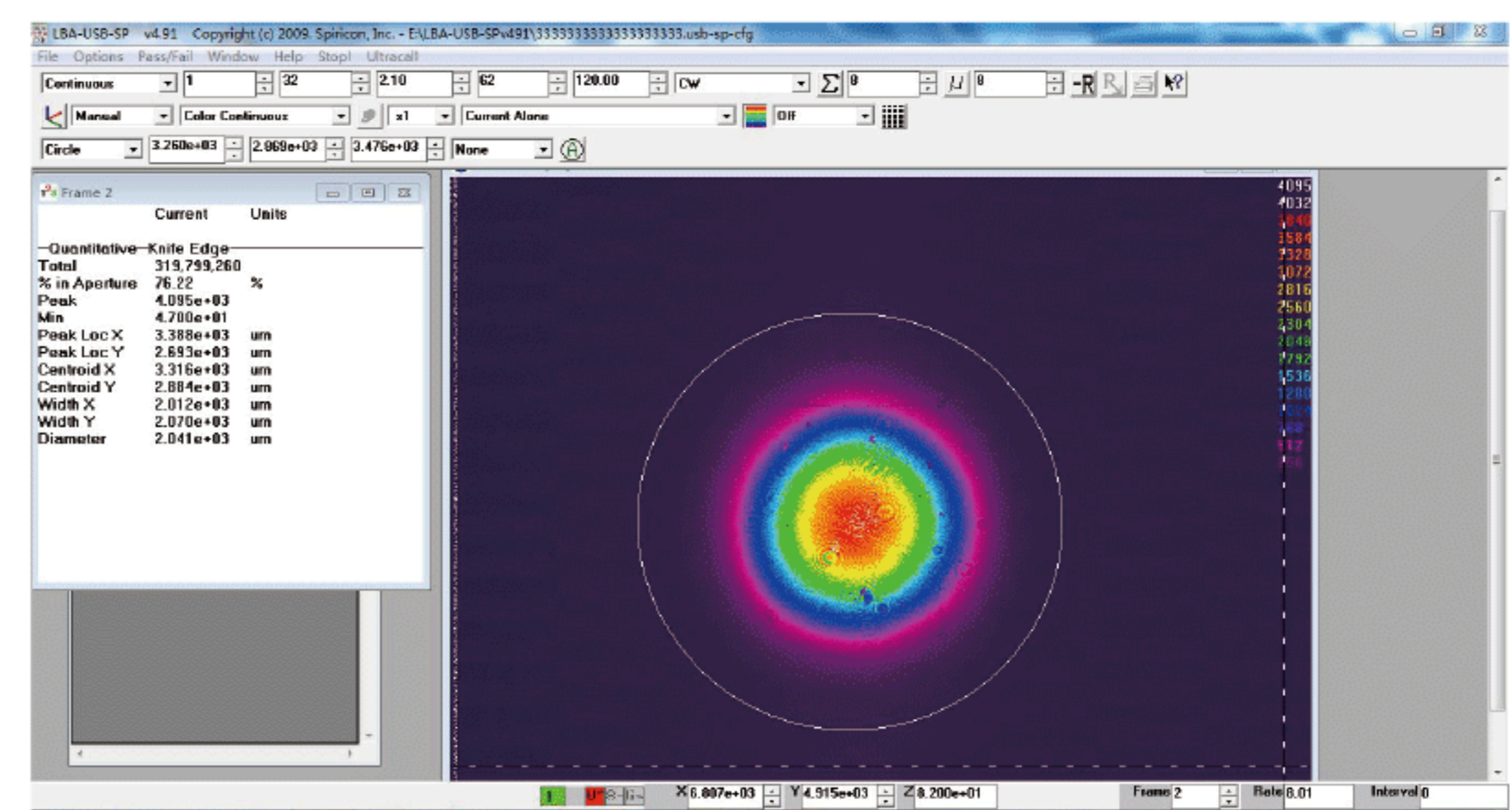
*External diode pumping, power supply and laser head are non-detachable. Power supply size:150×76×200cm
All specifications are subject to change without prior notice

Ordering information

MCD Series Model List			
Wavelength (nm)	Part Number	Repetition rate (kHz)	Pulse energy (μJ)
1064	MCD-1064-0.1-150	0.1	150
	MCD-1064-0.1-500	0.1	500
	MCD-1064-0.5-130	0.5	130
	MCD-1064-1-100	1	100
532	MCD-532-0.1-075	0.1	75
	MCD-532-0.1-250	0.1	250
	MCD-532-0.5-065	0.5	65
	MCD-532-1-050	1	50
355	MCD-355-0.1-030	0.1	30
	MCD-355-0.1-100	0.1	100
	MCD-355-0.5-025	0.5	25
	MCD-355-1-020	1	20
266	MCD-266-0.1-010	0.1	10
	MCD-266-0.1-030	0.1	30
	MCD-266-0.5-007	0.5	7
	MCD-266-1-005	1	5



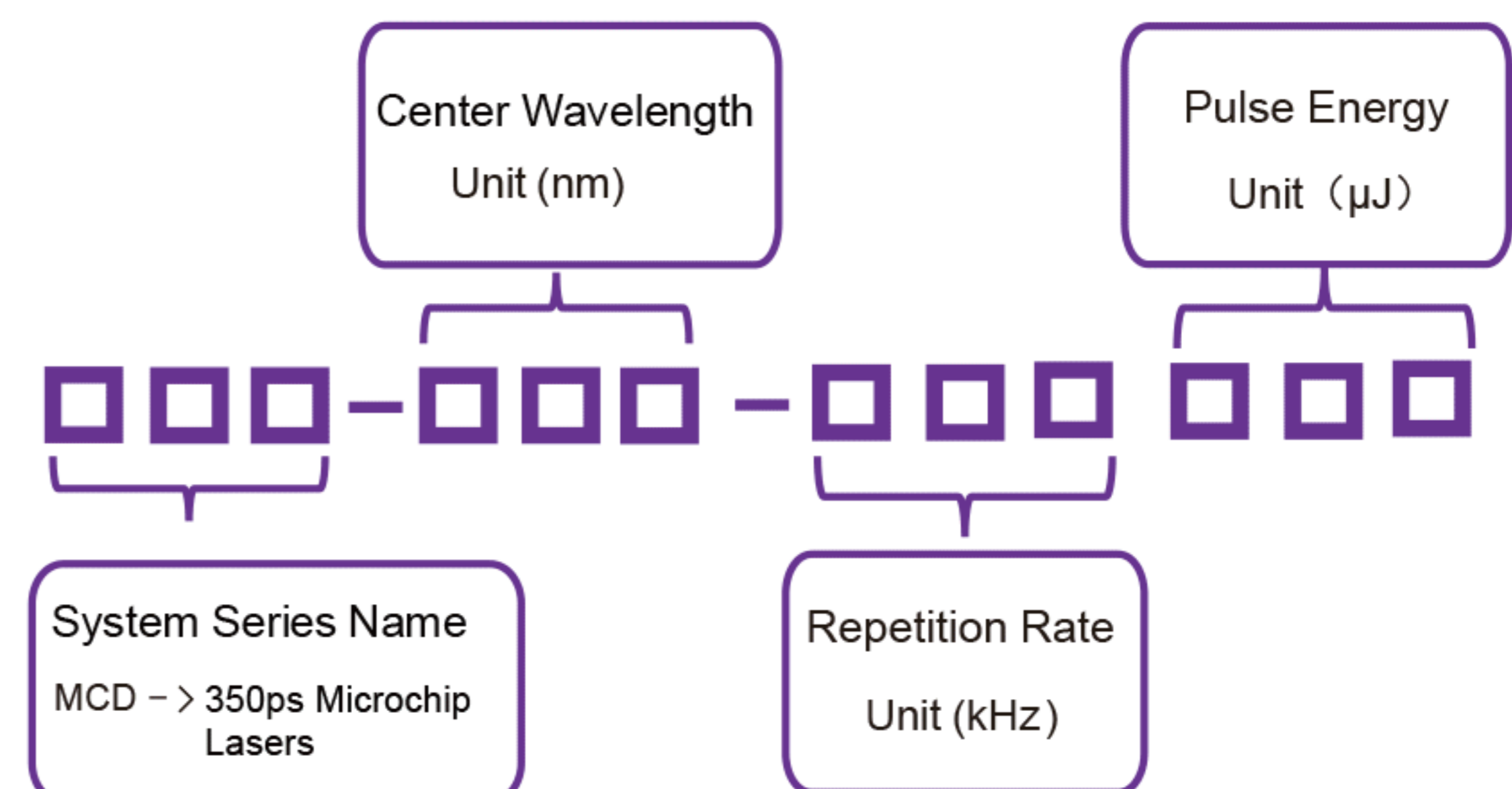
Typical Pulse



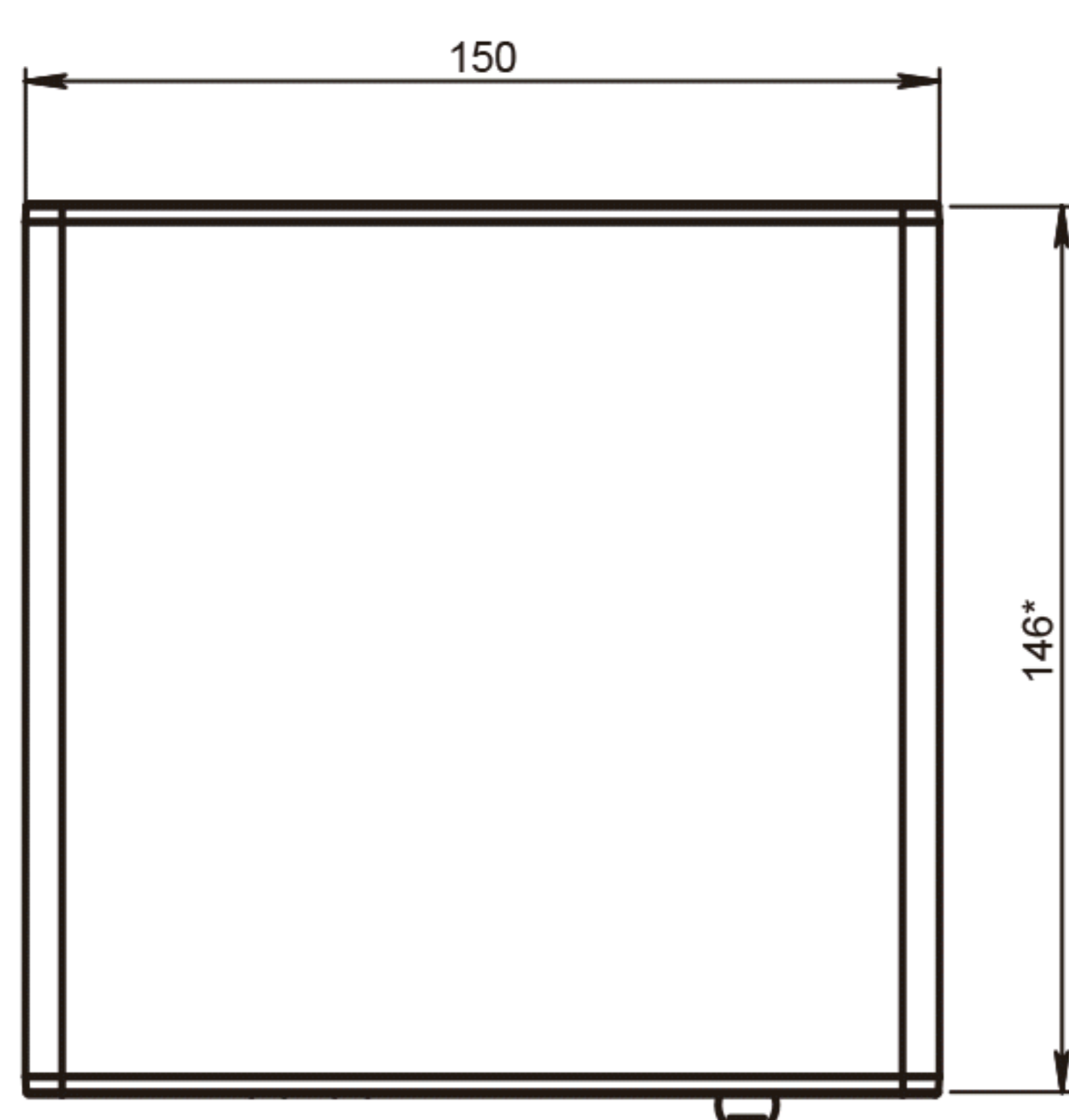
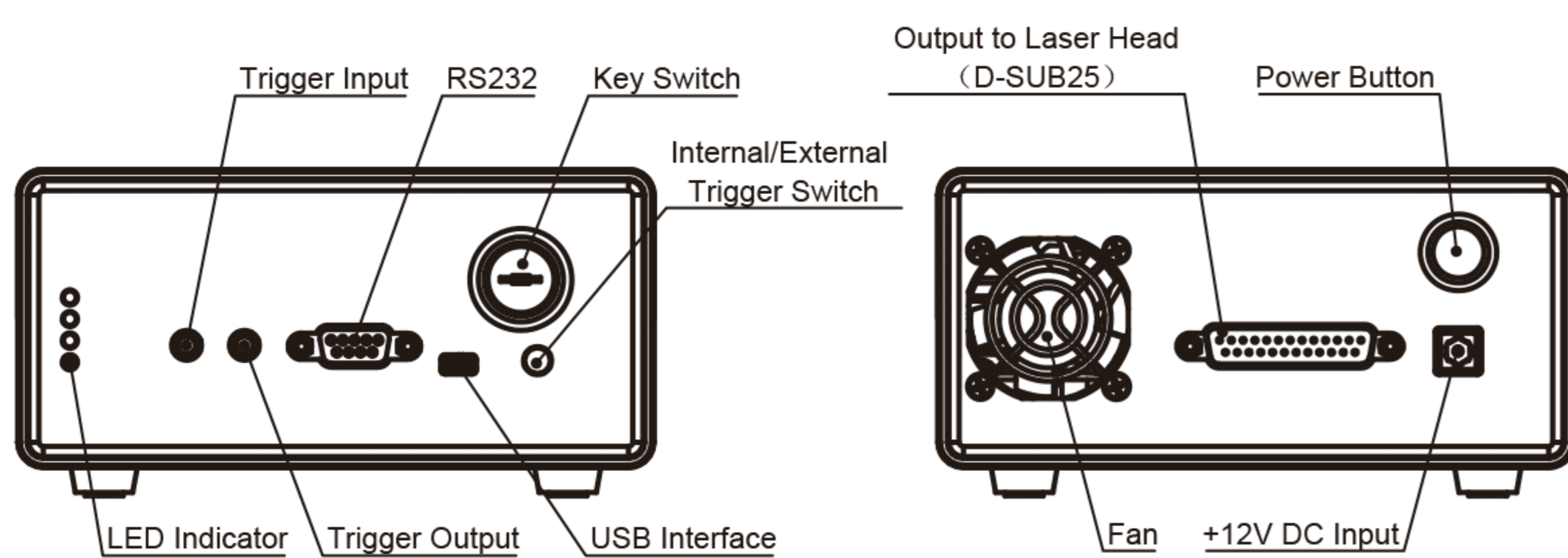
Beam Profile

Part numbering schema

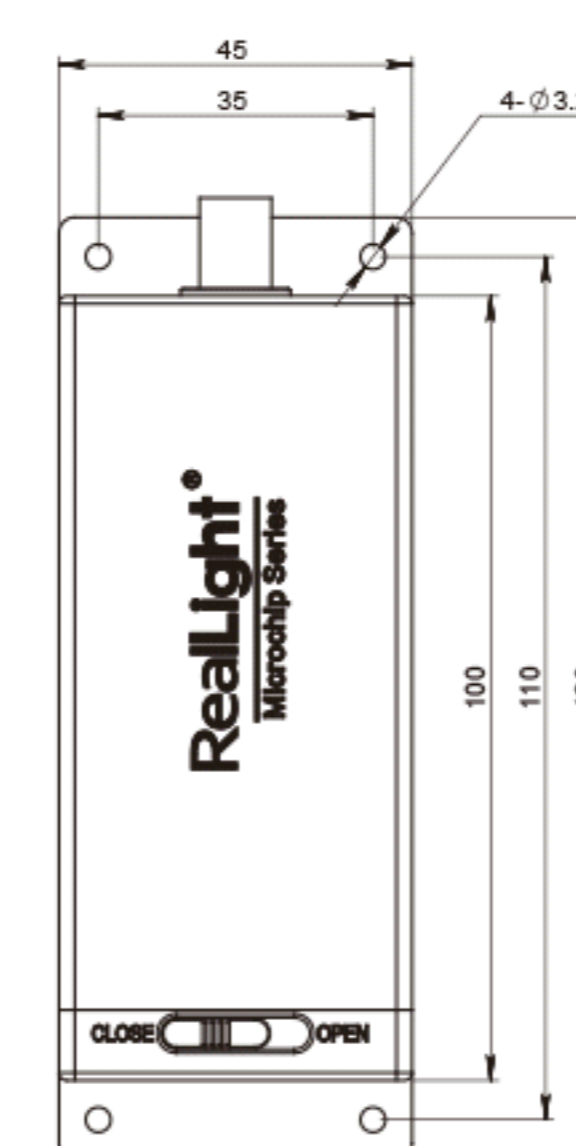
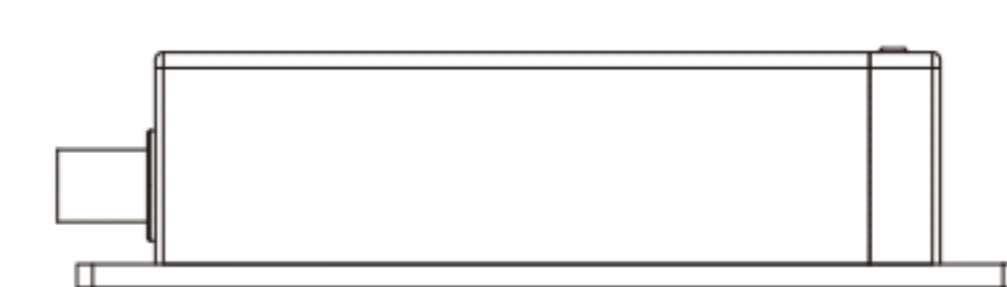
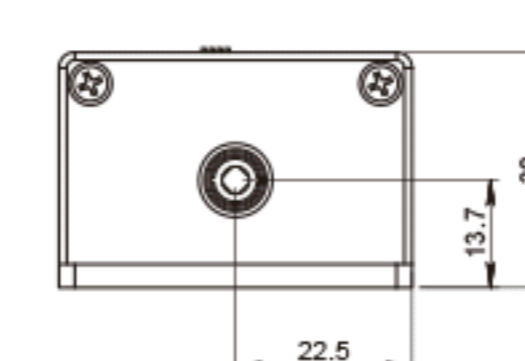
Part numbering schema



Mechanical Specifications



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



Unit: mm