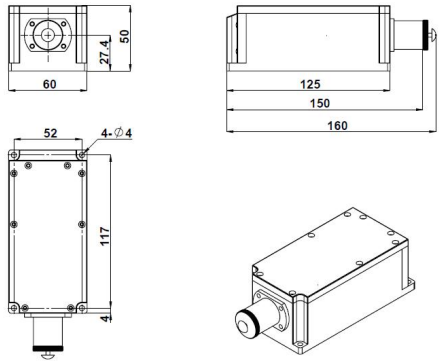
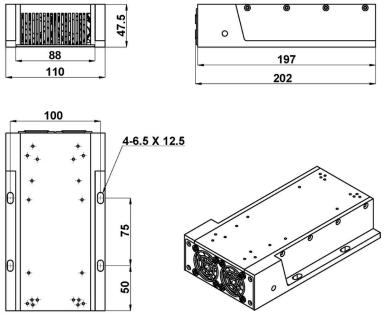
MPL-U-xxx-SU series (900-1060nm)

LD PUMPED ALL-SOLID-STATE PASSIVELY LASER

All solid state passively laser has the features of high peak power, high repetition rate, and short pulse duration, which is widely used in marking, carving, measure, research and so on.

SPECIFICATIONS

Wavelength (nm)		946±1	1047±1	1053±1
Operating mode		Passively		
Average power (mW)[1]		1-150	1-300	1-450
Single pulse energy (μJ)[2]		1-20	1-150	1-50
Pulse duration (ns)		~5	~10	~10
Peak power (kW)		0.1-2	0.1-15	0.1-5
Rep. rate	Int[3]	1Hz-4kHz	1Hz-1kHz	
	Ext[4]	1Hz-4kHz	1Hz-1kHz	
	QCW[5]	5-9kHz	2-5kHz	
Power stability (rms, 4 hours ±3°C)		<5%, <3%, <2%		
Transverse mode		TEM_{00}		
M^2		<2.0		
Beam diameter at the aperture (mm)		~1.2		
Beam divergence, full angle (mrad)		<2.0		
Warm-up time (minutes)		<5		
Beam height from base plate (mm)		27.4		
Operating temperature (℃)		10-35		
Power supply (100-240VAC)		PSU-SR		
Expected lifetime (hours)		>10000		

LASER HEAD[6]	HEATSINK (optional TC-02-FS)	POWER SUPPLY (PSU-SR)[7]
		
160(L)×60(W) ×50(H) mm³, 0.9kg	**202(L)×110(W)×47.5(H) mm³, 1.25kg**	**188(L) ×145(W) ×83(H) mm³, 1.2kg**

1 Average power (mW)= Single pulse energy (μJ)* Rep. rate(kHz)

2 Any energy level can be selected within this range.

3 The frequency is selectable from one or five discrete values within the range.

4 External triggered.

5 The rep.rate is a free running value within this range.

6 The laser head needs to be used on a heat sink with good heat dissipation.

7 In INT and EXT modes, the output energy is fixed；Only in QCW mode is the output power adjustable from 10% to 100%.