



MPL-S-xxx-HF series

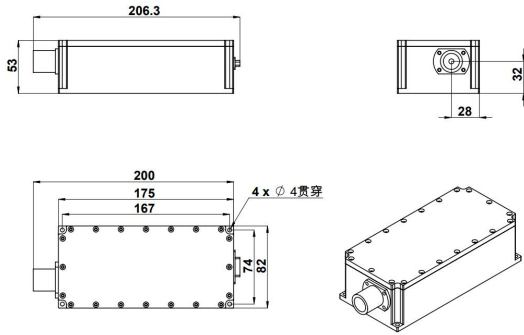
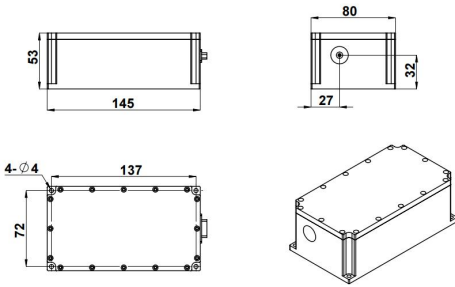
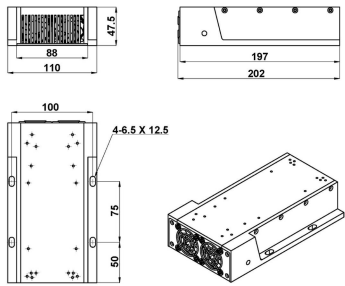
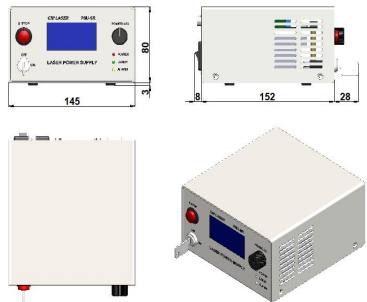
LD PUMPED ALL-SOLID-STATE PASSIVELY LASER

The all-solid-state passively Q-switched laser, known for its high repetition rate and short pulse duration, is widely used in scientific research, material processing, photoacoustic imaging, fluorescence lifetime imaging, LIDAR, and LIBS (Laser-Induced Breakdown Spectroscopy).



SPECIFICATIONS

Wavelength (nm)		532±1		1064±1					
Operating mode		Passively							
Average power (mW) ^{1,2}		80-120	~30	150-250	~60	~75	~180	~270	~300
Single pulse energy (μJ)		~1	~1	~2	~2	~15	~18	~18	~30
Pulse duration (ps)		~500				~1100	~900		~500
Peak power (kW)		~2		~4		~14	~20		~60
Rep. rate (kHz)	Int ³	/	30	/	30	5	10	15	10
	Ext ⁴	/	30	/	30	5	10	15	10
	QCW ⁵	80-120	/	80-120	/	/	/	/	/
Power stability (rms, 4 hours ±3°C)		<3%, <2%, <1%							
Transverse mode		TEM ₀₀							
M ²		<1.5							
Beam diameter at the aperture (mm)		~1							
Beam divergence, full angle (mrad)		<1.5							
Polarization ratio		>100:1, 45 degrees polarization		>100:1, Vertical (Horizontal optional)					
Warm-up time (minutes)		<5							
Beam height from base plate (mm)		32							
Operating temperature (°C)		10-35							
Power supply (100-240VAC)		PSU-SR							
Expected lifetime (hours)		>10000							

LASER HEAD (MPL-S-532-HF) ⁶	LASER HEAD (MPL-S-1064-HF) ⁶
 206.3(L)×82(W)×53(H) mm³	 145(L)×80(W)×53(H) mm³, 1.15kg
HEATSINK (optional TC-02-FS)	POWER SUPPLY ⁷
 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 This specification varies within this range from one device to another.
- 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 Fixed output energy.