



MPL-S-xxx-HP series (501-1100nm)

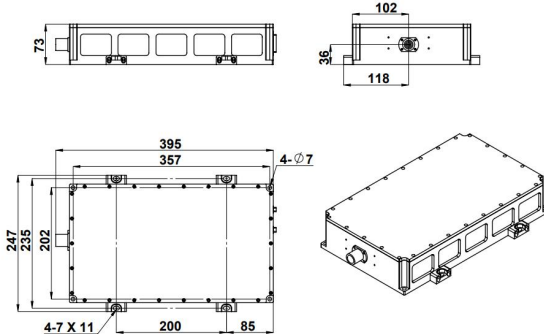
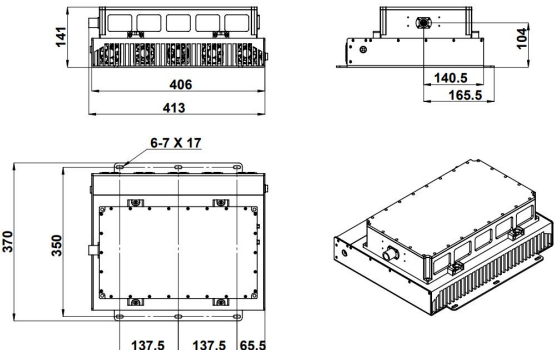
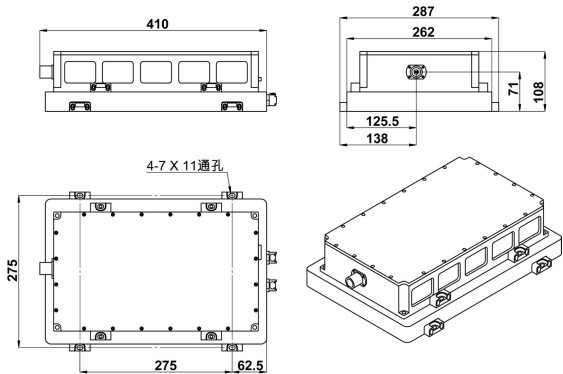
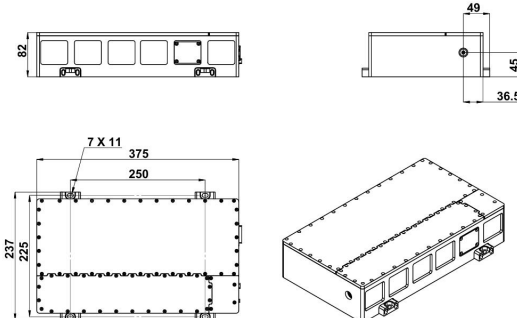
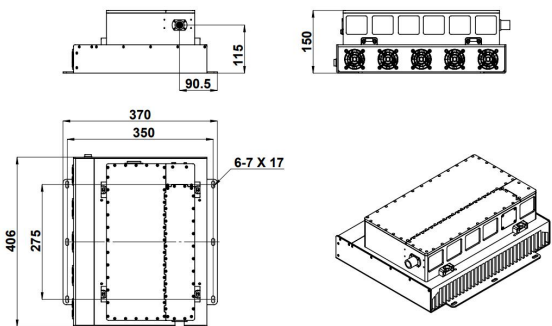
HIGH ENERGY DIODE PUMPED ALL-SOLID-STATE PASSIVELY LASER

All-solid-state passive lasers, which feature high peak power and short pulse duration, are widely used in scientific research, laser micromachining, lidar ranging, environmental monitoring, laser ultrasonic testing, and LIBS (Laser-Induced Breakdown Spectroscopy).

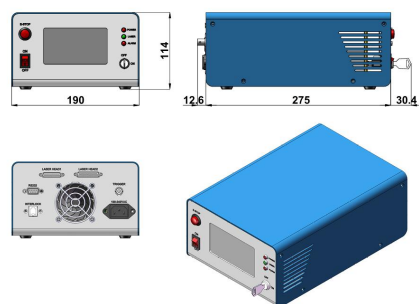


SPECIFICATIONS

Wavelength (nm)		532±1					1064±1				
Operating mode		Passively									
Average power (mW) ¹		~1500	~900	~700	~250	~400	~4000	~2000	~2000	~500	~1000
Single pulse energy (μJ)		~15	~22.5	~175	~250	~400	~40	~50	~500	~500	~1000
Pulse duration (ps)		~500	~700	~800	~400	~500	~500	~700	~800	~400	~500
Peak power (kW)		30	32.1	175	625	800	80	71.4	500	1250	2000
Rep. rate (kHz)	Int ²	/	/	1-4	0.001-1	0.001-1	/	/	1-4	0.001-1	0.001-1
	Ext ³	/	/	1-4	0.001-1	0.001-1	/	/	1-4	0.001-1	0.001-1
	QCW ⁴	~100	~40	/	/	/	~100	~40	/	/	/
Power stability (rms, 4 hours ±3°C)		<5%, <3%									
Transverse mode		TEM ₀₀									
Beam diameter at the aperture (mm)		~1.5									
Beam divergence, full angle (mrad)		<1.5									
Warm-up time (minutes)		<5									
Beam height from base plate (mm)		45		36			45		36		
Cooled method		Fan cooled				Water cooled	Fan cooled				Water cooled
Operating temperature (°C)		10-35									
Power supply (100-240VAC)		PSU-S-HP									
Expected lifetime (hours)		>10000									

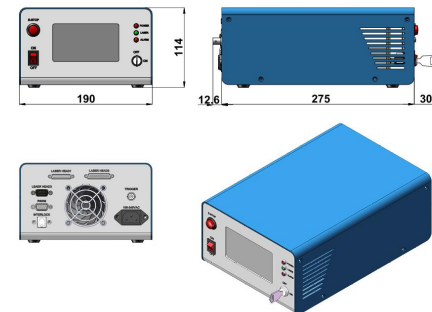
LASER HEAD⁵ (0.01-4kHz)  395(L)×247(W)×73(H) mm³, 8.0kg	LASER HEAD (0.01-4kHz; Fan cooled)  413(L)×370(W)×141(H) mm³, 10.5kg	LASER HEAD (0.01-4kHz; Water cooled)  410(L)×287(W)×108(H) mm³, 17.5kg
WATER CHILLER (WCH-580)  253.2(L) ×363.8(W) ×240.6(H) mm³, 11.0kg	LASER HEAD⁵ (40&100kHz)  375(L)×237(W)×82(H) mm³, 10.5kg	LASER HEAD (40&100kHz; Fan cooled)  406(L)×370(W)×150(H) mm³, 21.0kg

POWER SUPPLY (PSU-S-HP@0.01-4kHz)⁶



318(L)×190(W)×114(H) mm³, 3.2kg

POWER SUPPLY (PSU-S-HP@40&100kHz)⁶



318(L)×190(W)×114(H) mm³, 3.2kg

- 1 Average power (mW)= Single pulse energy (μJ)* Rep. rate(kHz)
- 2 The frequency is selectable from one or five discrete values within the range.
- 3 External triggered.
- 4 The rep.rate is a free running value.
- 5 The laser head needs to be used on a heat sink with good heat dissipation.
- 6 Output power adjustable 10-100%; RS232 control optional.