



MPL-S-xxx-HP series (301-500nm)

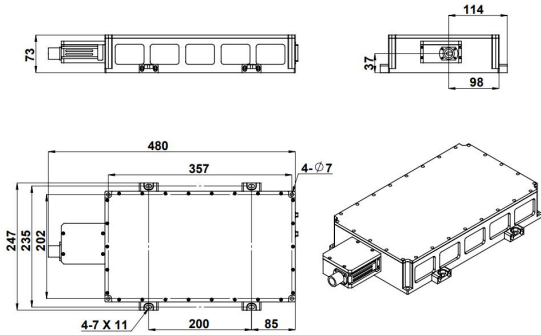
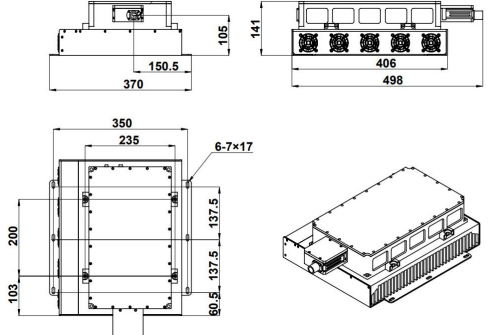
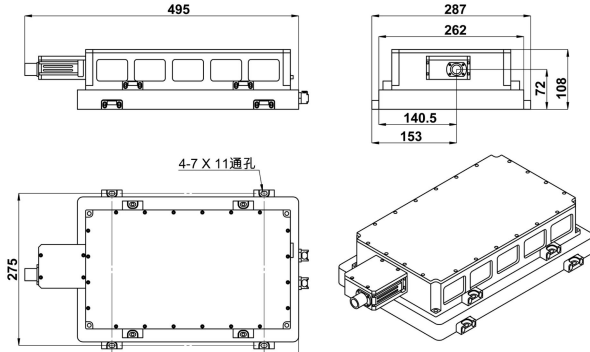
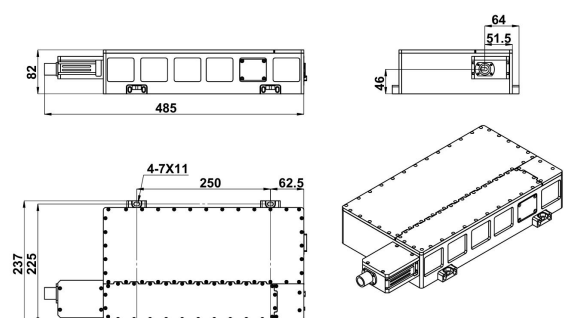
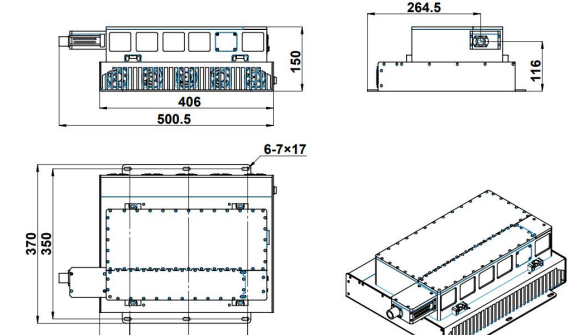
HIGH ENERGY DIODE PUMPED ALL-SOLID-STATE PASSIVELY LASER

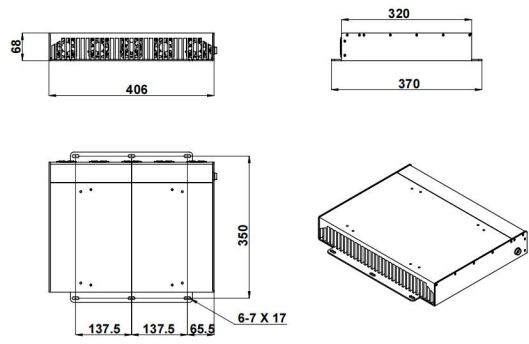
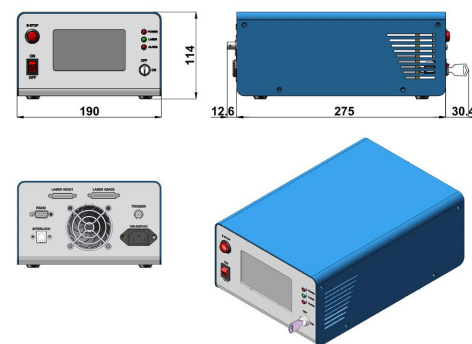
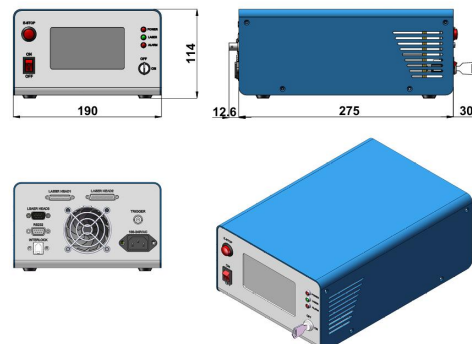
All-solid-state passive lasers, which feature high peak power and short pulse duration, are widely used in scientific research, laser micromachining, lidar ranging, environmental monitoring, laser ultrasonic testing, and LIBS (Laser-Induced Breakdown Spectroscopy).



SPECIFICATIONS

Wavelength (nm)		355±1				
Operating mode		Passively				
Average power (mW) ¹		~500	~600	~110	~60	~120
Single pulse energy (μJ)		~5	~15	~27.5	~60	~120
Pulse duration (ps)		~500	~700	~800	~400	~500
Peak power (kW)		10	21.4	27.5	150	240
Rep. rate (kHz)	Int ²	/	/	1-4	0.01-1	0.01-1
	Ext ³	/	/	1-4	0.01-1	0.01-1
	QCW ⁴	~100	~40	/	/	/
Power stability (rms, 4 hours ±3°C)		<5%, <3%				
Transverse mode		Near 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)		46		37		
Cooled method		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)  480(L) × 247(W) × 73(H) mm³, 8.5kg	LASER HEAD (0.01-4kHz; Fan cooled)  498(L) × 370(W) × 141(H) mm³, 19.0kg	LASER HEAD (0.01-4kHz; Water cooled)  495(L) × 287(W) × 108(H) mm³, 18.0kg
WATER CHILLER (WCH-580)  253.2(L) × 363.8(W) × 240.6(H) mm³, 11.0kg	LASER HEAD⁵ (40&100kHz)  485(L) × 237(W) × 82(H) mm³, 11.0kg	LASER HEAD (40&100kHz; Fan cooled)  500.5(L) × 370(W) × 150(H) mm³, 21.5kg

HEATSINK(TC-HP-FS)	POWER SUPPLY (PSU-S-HP@0.01-4kHz) ⁶	POWER SUPPLY (PSU-S-HP@40&100kHz) ⁶
 406(L)×370(W) ×68(H) mm³, 10.5kg	 318(L)×190(W) ×114(H) mm³, 3.2kg	 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.