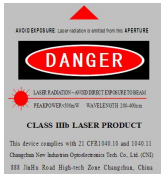
MPL-S-xxx-HP series (200-300nm)

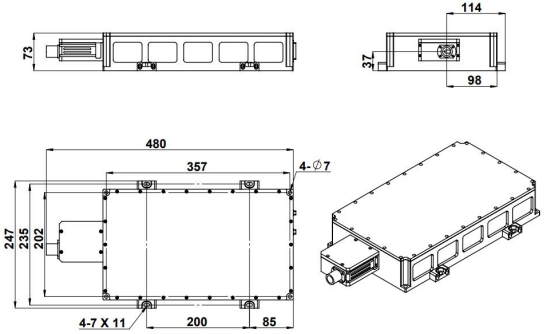
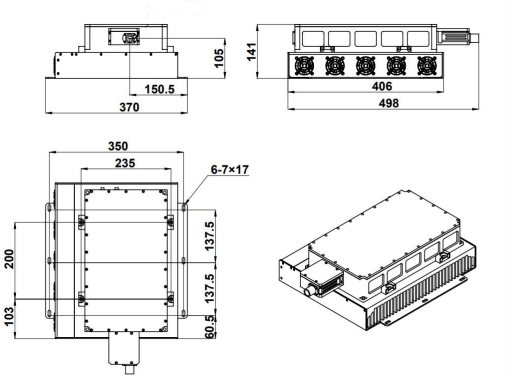
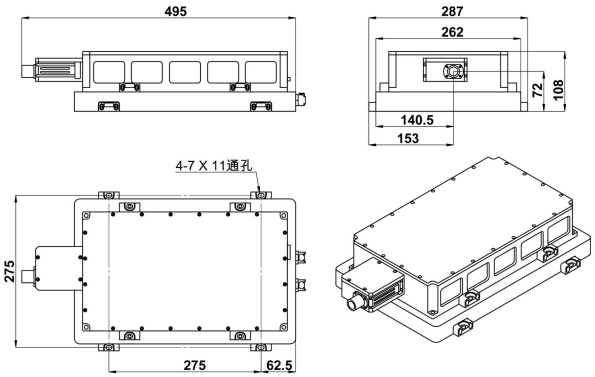
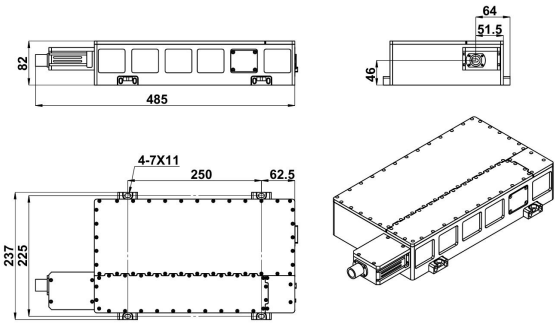
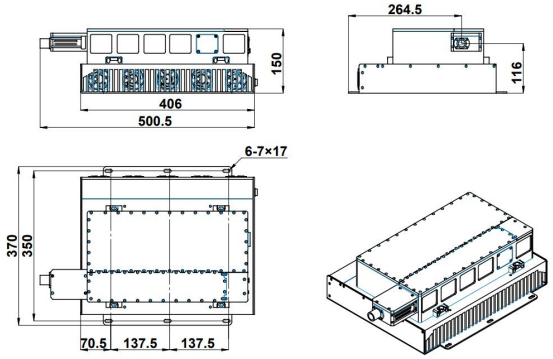
HIGH ENERGY DIODE PUMPED ALL-SOLID-STATE PASSIVELY LASER

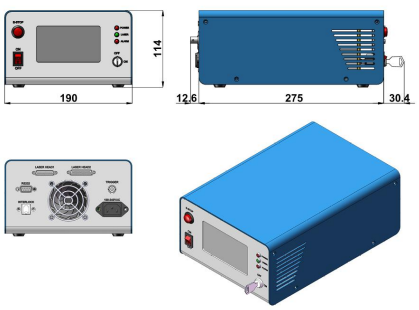
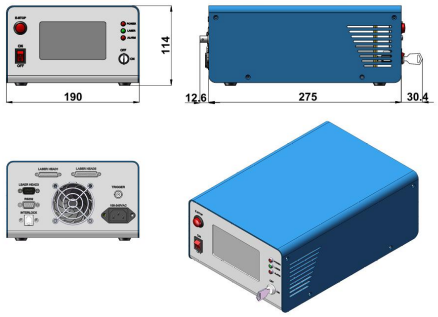


All-solid-state passive lasers, which feature high peak power and short pulse duration, are widely used in scientific research, laser micromachining, lidar ranging, environmental monitoring, laser ultrasonic testing, and LIBS (Laser-Induced Breakdown Spectroscopy).

SPECIFICATIONS

Wavelength (nm)		213±1				266±1				
Operating mode		Passively								
Average power (mW)[1]		~50	~40	~30	~20	~100	~100	~100	~60	~80
Single pulse energy (μJ)		~0.5	~1	~7.5	~20	~1	~2.5	~25	~60	~80
Pulse duration (ps)		~500	~700	~800	~400	~500	~700	~800	~400	~500
Peak power (kW)		1	1.4	7.5	50	2	3.5	25	150	160
Rep. rate (kHz)	Int[2]	/	/	1-4	0.01-1	/	/	1-4	0.01-1	0.01-1
	Ext[3]	/	/	1-4	0.01-1	/	/	1-4	0.01-1	0.01-1
	QCW[4]	~100	~40	/	/	~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		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 HEAD[5] (0.01-4kHz)	LASER HEAD (0.01-4kHz; Fan cooled)	LASER HEAD (MPL-S-266-HP@0.01-4kHz; Water cooled)
		
480(L) ×247(W) ×73(H) mm³, 8.5kg	**498(L) ×370(W) ×141(H) mm³, 19.0kg**	**495(L) ×287(W) ×108(H) mm³, 18.0kg**
WATER CHILLER (WCH-580)	LASER HEAD[5] (40&100kHz)	LASER HEAD (40&100kHz; Fan cooled)
		
253.2(L) ×363.8(W) ×240.6(H) mm³, 11.0kg	**485(L) ×237(W) ×82(H) mm³, 11.0kg**	**500.5(L) ×370(W) ×150(H) mm³, 21.5kg**

POWER SUPPLY (PSU-S-HP@0.01-4kHz)[6]	POWER SUPPLY (PSU-S-HP@40&100kHz)[6]
 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.