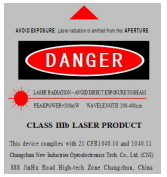
MPL-S-532-HP

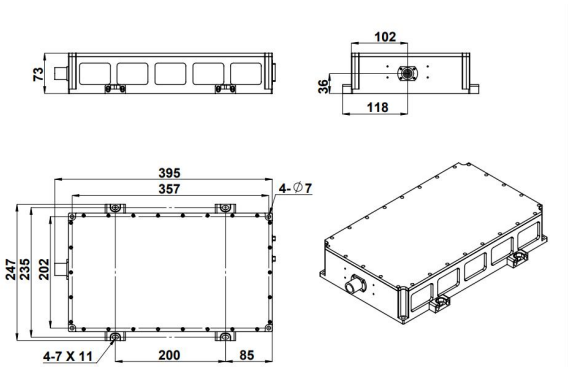
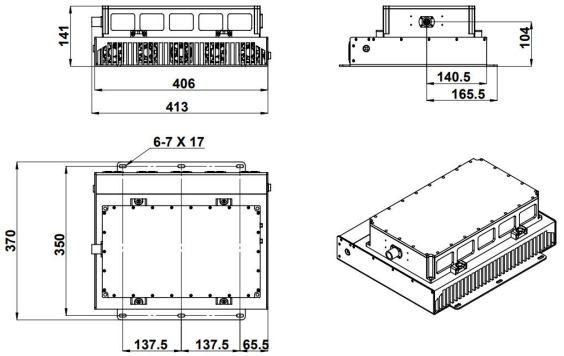
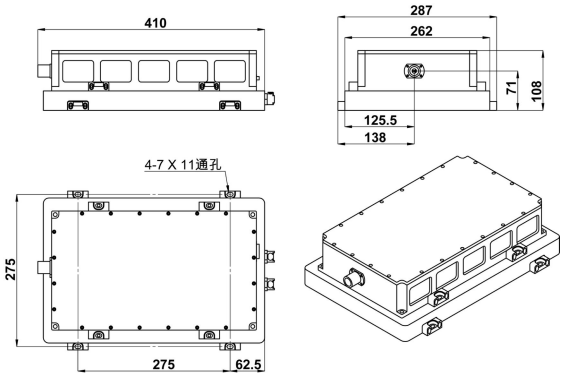
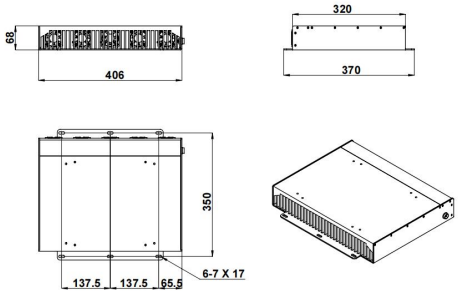
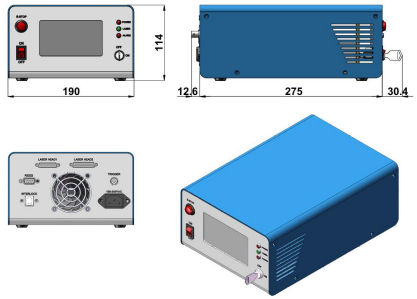
HIGH ENERGY DIODE PUMPED ALL-SOLID-STATE PASSIVELY LASER



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		
Operating mode		Passively		
Average power (mW)[1]		120-700	80-250	250-400
Single pulse energy (μJ)		30-175	80-250	250-400
Pulse duration (ns)		~0.7	~0.5(~0.4 optional)	~0.5
Peak power (kW)		43-250	160-500	500-800
Rep. rate	Int[2]	1-4kHz	1Hz-1kHz	
	Ext[3]	1-4kHz	1Hz-1kHz	
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)		36		
Cooled method		Fan cooled		Water cooled
Operating temperature (°C)		10-35		
Power supply (100-240VAC)		PSU-S-HP		
Expected lifetime (hours)		>10000		

LASER HEAD[4]	LASER HEAD (Fan cooled)	LASER HEAD (Water cooled)
		
395(L)×247(W)×73(H) mm³, 8.0kg	413(L) ×370(W) ×141(H) mm³, 18.5kg	410(L)×287(W)×108(H) mm³, 17.5kg
HEATSINK(TC-HP-FS)	**WATER CHILLER (WCH-580)**	**POWER SUPPLY[5]**
		
406(L)×370(W) ×68(H) mm³, 10.5kg	253.2(L) ×363.8(W) ×240.6(H) mm³, 11.0kg	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 laser head needs to be used on a heat sink with good heat dissipation.

5 Output power adjustable 10-100%; RS232 control optional.