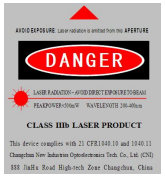
MPL-S-xxx-HP series



High energy diode pumped all-solid state Q-switched laser

All solid state Q-switched laser at 1064nm has the features of high peak power and short pulse duration, which is widely used in scientific research, laser micromaching, laser radar ranging, environment monitoring, laser ultrasonic monitoring and LIBS (Laser Induced Breakdown Spectroscopy) etc.

SPECIFICATIONS

Model	MPL-S-213-HP			MPL-S-266-HP				MPL-S-355-HP			
Wavelength (nm)	213±1			266±1				355±1			
Operating mode	Q-switched pulsed laser										
Max average power (mW)*	~40	~30	~20	~160	~100	~60	~80	~600	~110	~60	~120
Single pulse energy (μJ)	~1	~7.5	~20	~4	~25	~60	~80	~15	~27.5	~60	~120
Pulse duration (ps)	~700	~1000	~400	~700	~1000	~400	~500	~700	~1000	~400	~500
Peak power (kW)	1.4	7.5	50	5.7	25	150	160	21.4	27.5	150	240
Rep. rate (kHz) (optional)	~40	1~4	0.01~1	~40	1~4	0.01~1	0.01~1	~40	1~4	0.01~1	0.01~1
Ave power stability (over 4 hours)	<5%							<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)	32										
Cooled method	TC-05-FS (Fan Cooled)			TC-05-FS (Fan Cooled)			WCH-580 (Water Cooled)	TC-05-FS (Fan Cooled)			WCH-580 (Water Cooled)
Operating temperature (℃)	15~30										
Power supply (90-264VAC)	PSU-S-HP										
Expected lifetime (hours)	10000										
Warranty	1 year										

Average power (mW)= Single pulse energy (μJ) Rep. rate(kHz)

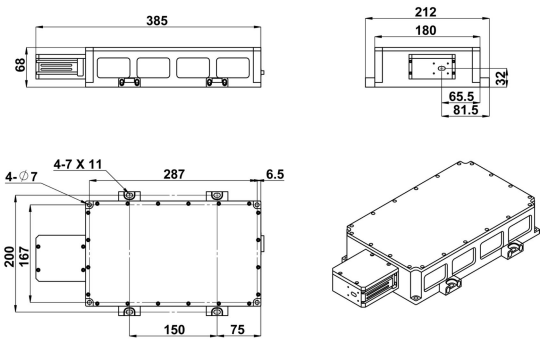
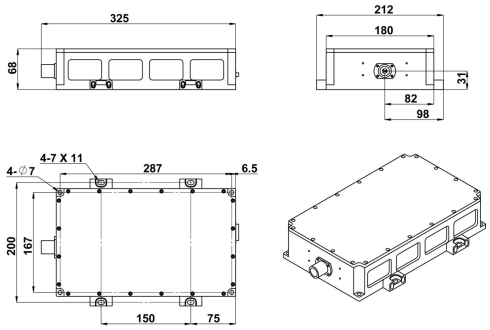
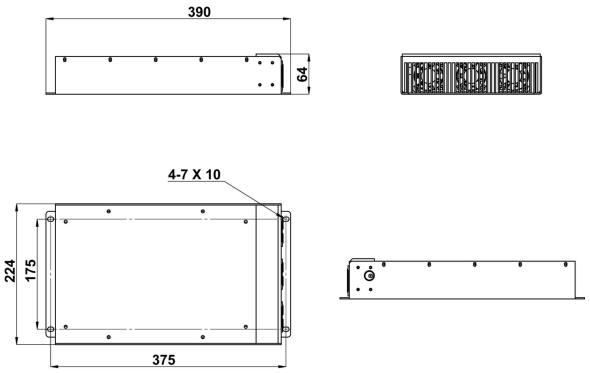
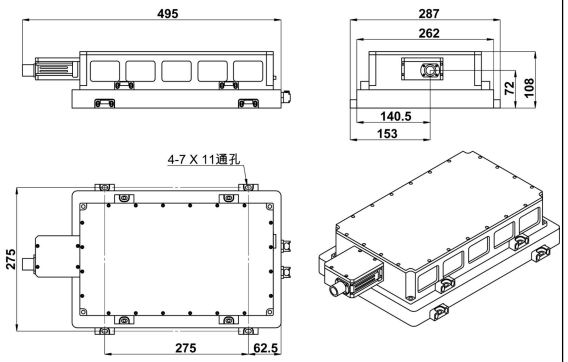
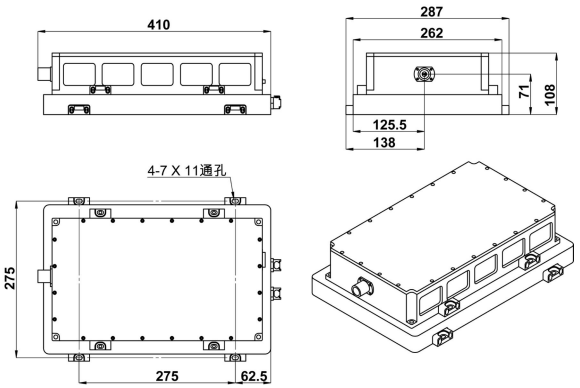
Note: The laser head needs to be used on a heat sink with good heat dissipation.

SPECIFICATIONS

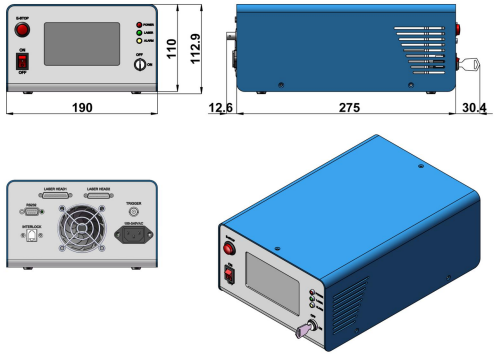
Model	MPL-S-532-HP				MPL-S-1064-HP			
Wavelength (nm)	532±1				1064±1			
Operating mode	Q-switched pulsed laser							
Max average power (mW)*	~900	~700	~250	~400	~2000	~2000	~500	~1000
Single pulse energy (μJ)	~22.5	~175	~250	~400	~50	~500	~500	~1000
Pulse duration (ps)	~700	~1000	~400	~500	~700	~1000	~400	~500
Peak power (kW)	32.1	175	625	800	71.4	500	1250	2000
Rep. rate (kHz) (optional)	~40	1~4	0.01~1	0.01~1	~40	1~4	0.01~1	0.01~1
Ave power stability (over 4 hours)	<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)	32							
Cooled method	TC-05-FS (Fan Cooled)			WCH-580 (Water Cooled)	TC-05-FS (Fan Cooled)			WCH-580 (Water Cooled)
Operating temperature (℃)	15~30							
Power supply (90-264VAC)	PSU-S-HP							
Expected lifetime (hours)	10000							
Warranty	1 year							

Average power (mW)= Single pulse energy (μJ) Rep. rate(kHz)

Note: The laser head needs to be used on a heat sink with good heat dissipation.

LASER HEAD (MPL-S-213-HP/ MPL-S-266-HP/ MPL-S-355-HP)	LASER HEAD (MPL-S-532-HP/ MPL-S-1064-HP)	TC-05-FS
 385(L)×212(W) ×68(H) mm³	 325(L)×212(W)×68(H) mm³	 390(L) ×224(W) ×64(H) mm³
LASER HEAD (MPL-S-213-HP/ MPL-S-266-HP/ MPL-S-355-HP) (Water Cooled)	**LASER HEAD (MPL-S-532-HP/ MPL-S-1064-HP) (Water Cooled)**	**Water Chiller (WCH-580)**
 495(L)×287(W) ×108(H) mm³	 410(L)×287(W)×108(H) mm³	 253.2(L) ×363.8(W) ×240.6(H) mm³, 11.0 kg

POWER SUPPLY (PSU-S-HP)



318 (L) ×190(W) ×112.9 (H) mm^3