



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)*	~100	~40	~30	~20	~250	~160	~100	~60	~80	~500	~600	~110	~60	~120	
Single pulse energy (μJ)	~1	~1	~7.5	~20	~2.5	~4	~25	~60	~80	~5	~15	~27.5	~60	~120	
Pulse duration (ps)	~500	~700	~1000	~400	~500	~700	~1000	~400	~500	~500	~700	~1000	~400	~500	
Peak power (kW)	2	1.4	7.5	50	5	5.7	25	150	160	10	21.4	27.5	150	240	
Rep. rate (kHz) (optional)	~100	~40	1~4	0.01~1	~100	~40	1~4	0.01~1	0.01~1	~100	~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)	45		32			45		32			45		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 (°C)	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.

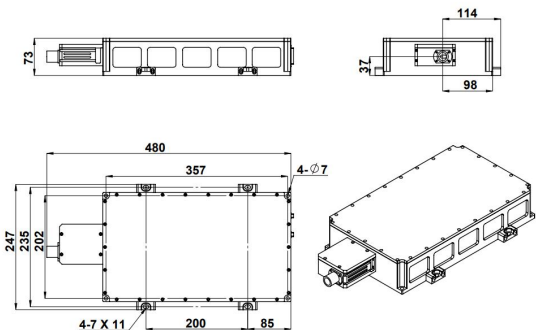
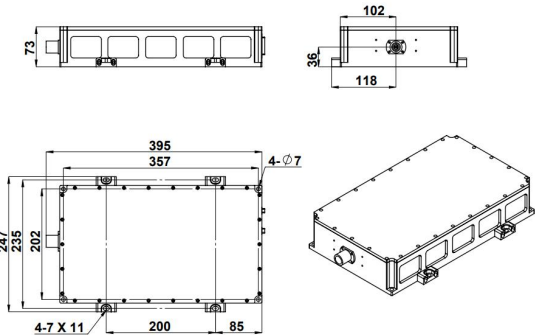
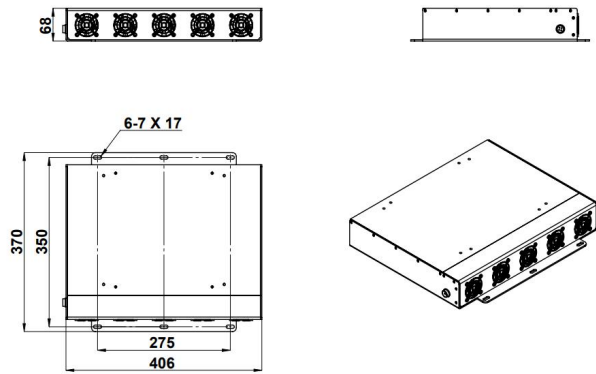
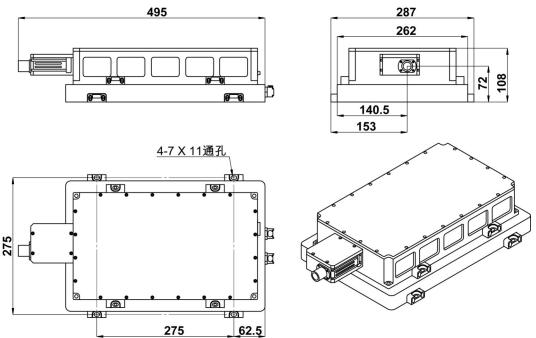
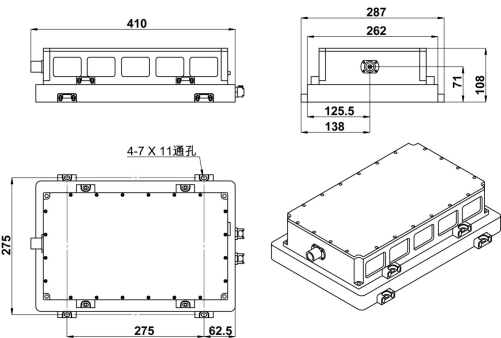


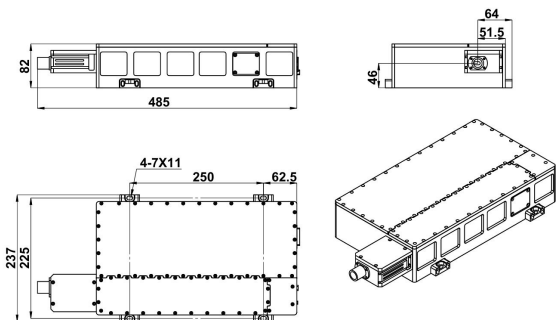
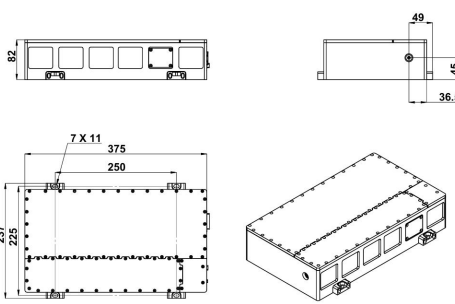
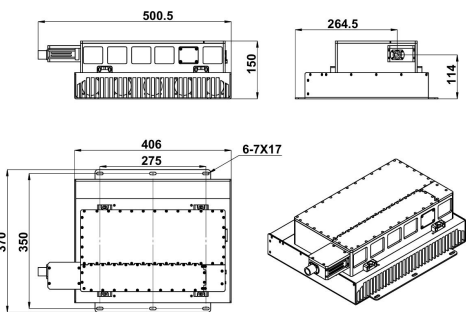
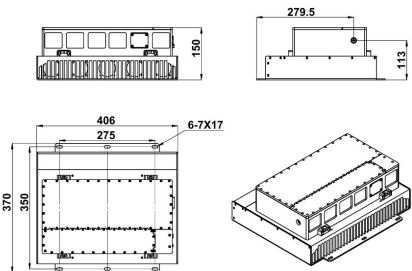
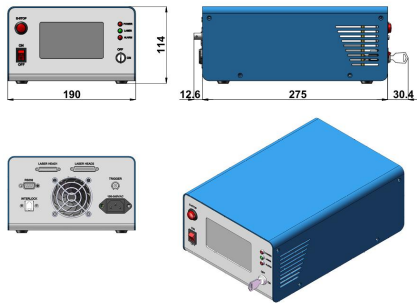
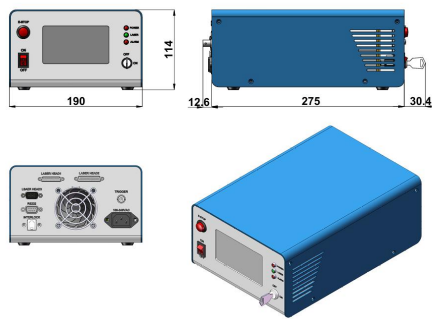
SPECIFICATIONS

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)*	~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	~1000	~400	~500	~500	~700	~1000	~400	~500
Peak power (kW)	30	32.1	175	625	800	80	71.4	500	1250	2000
Rep. rate (kHz) (optional)	~100	~40	1~4	0.01~1	0.01~1	~100	~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)	45		32			45		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@0.01-4kHz)	LASER HEAD (MPL-S-532-HP/ MPL-S-1064-HP@0.01-4kHz)	TC-05-FS
 480(L)×247(W)×73(H) mm³, 8.5kg	 395(L)×247(W)×73(H) mm³, 8kg	 406(L)×370(W)×68(H) mm³, 10.5kg
LASER HEAD (MPL-S-213-HP/ MPL-S-266-HP/ MPL-S-355-HP@0.01-4kHz) (Water Cooled)	LASER HEAD (MPL-S-532-HP/ MPL-S-1064-HP@0.01-4kHz) (Water Cooled)	Water Chiller (WCH-580)
 495(L)×287(W)×108(H) mm³, 18kg	 410(L)×287(W)×108(H) mm³, 17.5kg	 253.2(L)×363.8(W)×240.6(H) mm³, 11.0 kg

LASER HEAD (MPL-S-213-HP/ MPL-S-266-HP/ MPL-S-355-HP@40&100kHz)	LASER HEAD (MPL-S-532-HP/ MPL-S-1064-HP@40&100kHz)	LASER HEAD (MPL-S-213-HP/ MPL-S-266-HP/ MPL-S-355-HP@40&100kHz) (Fan Cooled)
 485(L)×237(W)×82(H) mm³, 11.0kg	 375(L)×237(W)×82(H) mm³, 10.5kg	 500.5(L)×370(W)×150(H) mm³, 21.5kg
LASER HEAD (MPL-S-532-HP/ MPL-S-1064-HP@40&100kHz) (Fan Cooled)	POWER SUPPLY (PSU-S-HP@0.01-4kHz)	POWER SUPPLY (PSU-S-HP@40&100kHz)
 406(L)×370(W)×150(H) mm³, 21kg	 318(L)×190(W)×114(H) mm³, 3.2kg	 318(L)×190(W)×114(H) mm³, 3.2kg