



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)*	~50	~40	~30	~20	~100	~100	~100	~60	~80	~500	~600	~110	~60	~120			
Single pulse energy (μJ)	~0.5	~1	~7.5	~20	~1	~2.5	~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)	1	1.4	7.5	50	2	3.5	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)				
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.

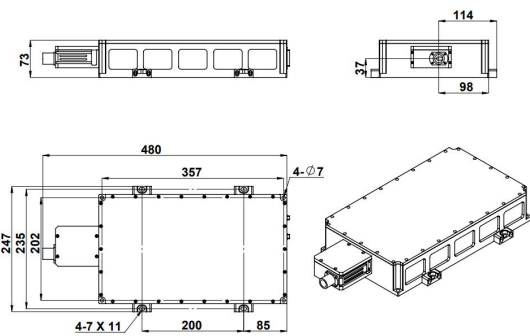
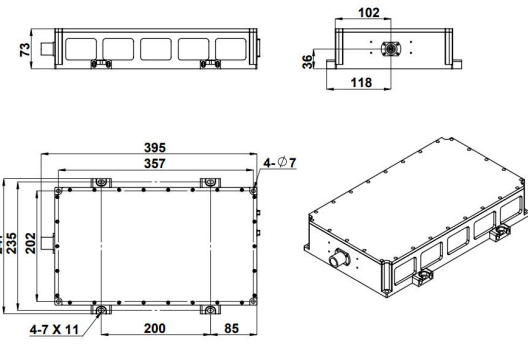
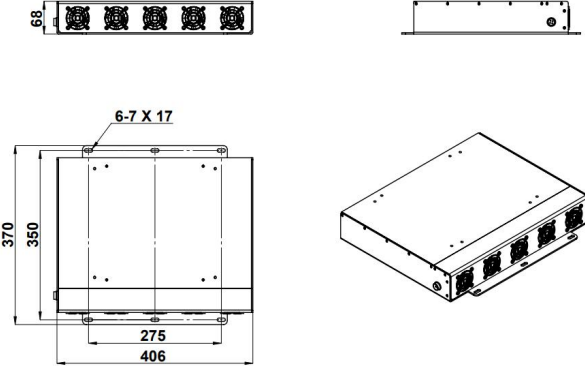
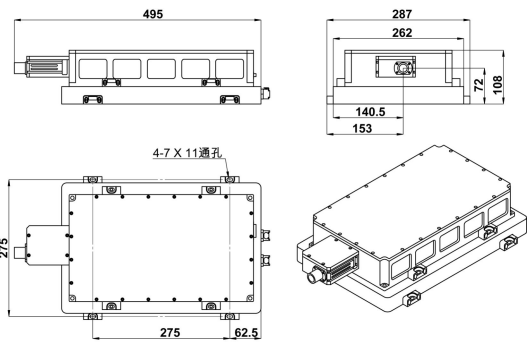
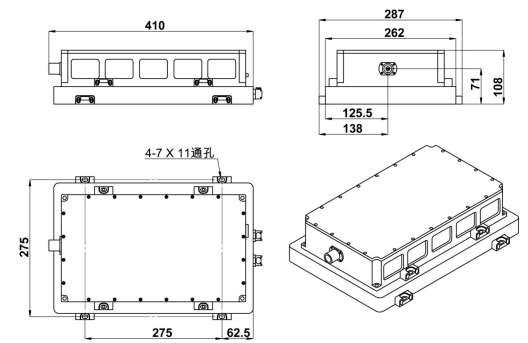



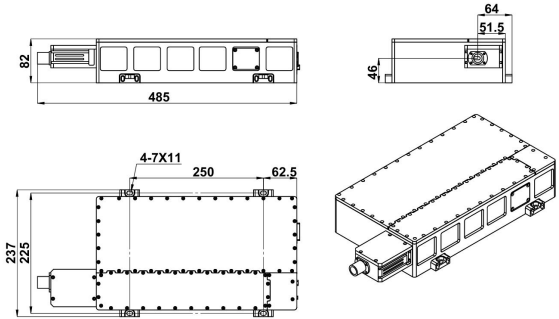
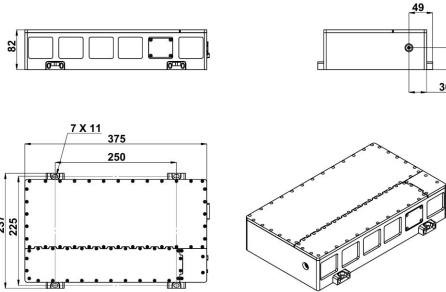
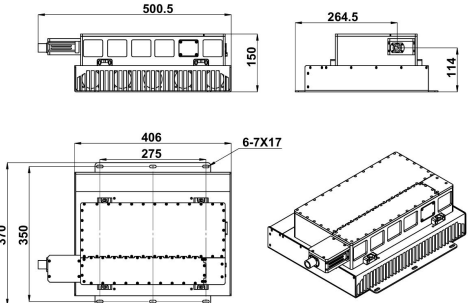
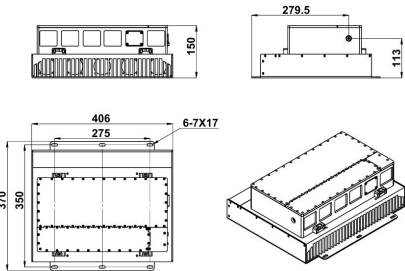
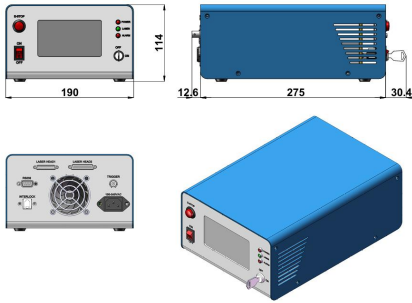
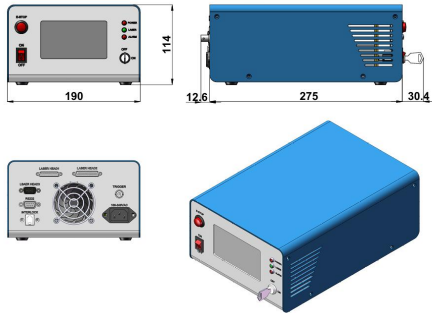
SPECIFICATIONS

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 (°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.

<p style="text-align: center;">LASER HEAD (MPL-S-213-HP/ MPL-S-266-HP/ MPL-S-355-HP@0.01-4kHz)</p>  <p style="text-align: center;">480(L)×247(W)×73(H) mm³, 8.5kg</p>	<p style="text-align: center;">LASER HEAD (MPL-S-532-HP/ MPL-S-1064-HP@0.01-4kHz)</p>  <p style="text-align: center;">395(L)×247(W)×73(H) mm³, 8kg</p>	<p style="text-align: center;">TC-05-FS</p>  <p style="text-align: center;">406(L)×370(W)×68(H) mm³, 10.5kg</p>
<p style="text-align: center;">LASER HEAD (MPL-S-213-HP/ MPL-S-266-HP/ MPL-S-355-HP@0.01-4kHz) (Water Cooled)</p>	<p style="text-align: center;">LASER HEAD (MPL-S-532-HP/ MPL-S-1064-HP@0.01-4kHz) (Water Cooled)</p>	<p style="text-align: center;">Water Chiller (WCH-580)</p>
 <p style="text-align: center;">495(L)×287(W)×108(H) mm³, 18kg</p>	 <p style="text-align: center;">410(L)×287(W)×108(H) mm³, 17.5kg</p>	 <p style="text-align: center;">253.2(L)×363.8(W)×240.6(H) mm³, 11.0 kg</p>

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