



MPL-U series



LD PUMPED ALL-SOLID-STATE Q-SWITCHED LASER

All solid state Q-switched laser has the features of high peak power, high repetition rate, and short pulse duration, which is widely used in industry (marking on the diamond or stone), teaching of nonlinear optics, experiments of generating 355nm, or 266nm laser, fiber communication, etc.



SPECIFICATIONS

Wavelength (nm)		473±1		523.5±1	526.5±1
Operating mode		Frequency conversion of Q-switched pulsed laser			
Max average power (mW)*		1~10	1~4	1~150	
Single pulse energy (μJ)		1~10	~1	1~60	
Pulse duration (ns)		~2.2	~3	~5	
Peak power (kW)		5.8	0.3	0.2~12	
Rep. rate (kHz)	INT FIXED (One internal fixed rep.rate)	10Hz-1kHz	1kHz -4kHz	1Hz-4kHz (Optional)	
	EXT TRIG (External triggered)	/		1Hz-4kHz	
	QCW	/		Between 5k-9kHz	
Ave power stability (over 4 hours)		<5%, <3%			
Transverse mode		Near TEM ₀₀			
M ² factor		<1. 5			
Beam diameter at the aperture (mm)		~1.0			
Beam divergence, full angle (mrad)		<2.0			
Polarization ratio		>100:1, Vertical (Horizontal Optional)			
Warm-up time (minutes)		<5			
Beam height from base plate (mm)		27.4			
Operating temperature (°C)		10~35			
Power supply (90-264VAC)		PSU-SR		PSU-H-LED/PSU-H-FDA	
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.



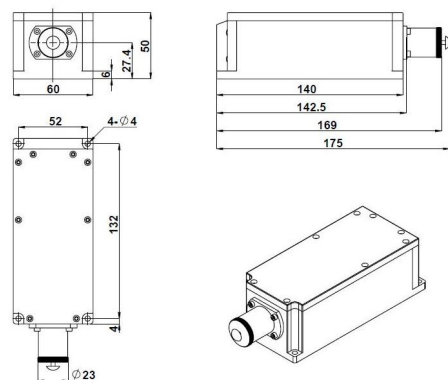
SPECIFICATIONS

Wavelength (nm)		532±1						656.5±1	660±1
Operating mode		Frequency conversion of Q-switched pulsed laser							
Max average power (mW)*		1-60	1~40	1~120	1~150		150~500		1~10
Single pulse energy (μJ)		0.025-1.4	1~40	1~30			30~60		1~5
Pulse duration (ns)		~0.4	~0.6	~0.8	~1.3	~5	~1.3	4	~15
Peak power (kW)		0.06~3.5	1.66-66	1.25~37.5	0.7~23	0.2~6	23~46	7.5~15	0.06~0.33
Rep. rate (kHz)	INT FIXED (One internal fixed rep.rate)	/	0.01~1.0	0.1, 0.2...1.0, 2.0, 3.0		1Hz-4kHz (Optional)		4k-6kHz (Optional)	1k-4kHz (Optional)
	EXT TRIG (External triggered)	/			1Hz-4kHz		4k-6kHz		1k-4kHz
	QCW	~40kHz	/		Between 5k-20kHz		Between 5k-12kHz		Between 2k-5kHz
Ave power stability (over 4 hours)		<5%, <3%, <1%						<5%, <3%	
Transverse mode		TEM ₀₀						Near TEM ₀₀	
M ² factor		<1.5							
Beam diameter at the aperture (mm)		~1.0							
Beam divergence, full angle (mrad)		<2.0							
Polarization ratio		>100:1, 45 degrees polarization			>100:1, Vertical (Horizontal Optional)			/	
Warm-up time (minutes)		<5							
Beam height from base plate (mm)		27.4							
Operating temperature (°C)		10~35							
Power supply (90-264VAC)		PSU-SR			PSU-H-LED/PSU-H-FDA				
Expected lifetime (hours)		10000							
Warranty		1 year							

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

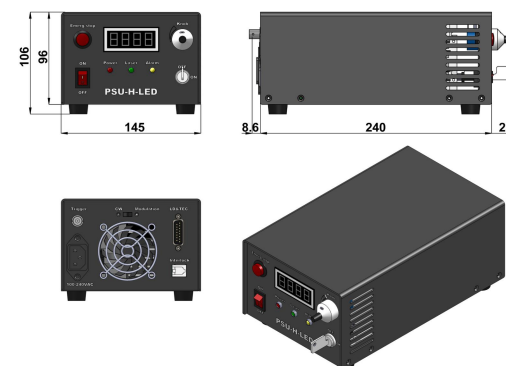
Note: The laser head needs to be used on a heat sink with good heat dissipation.

LASER HEAD



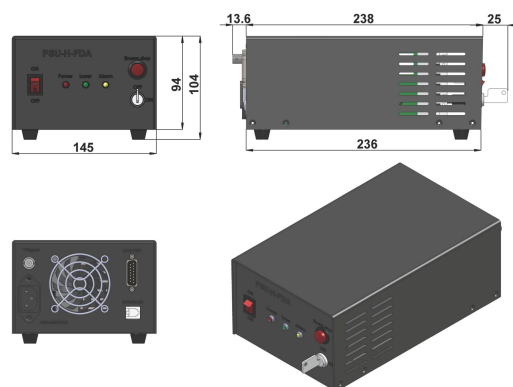
175(L)×60(W)×50(H) mm³, 1.0kg

POWER SUPPLY (PSU-H-LED)



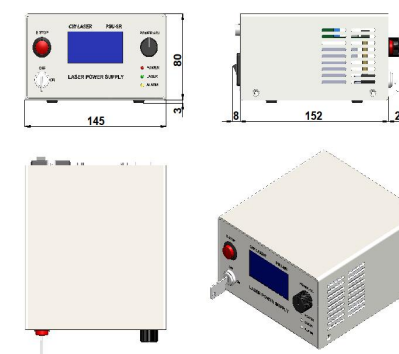
273.6 (L) × 145 (W) × 106 (H) mm³, 2.3 kg

POWER SUPPLY (PSU-H-FDA)



276.6(L) × 145(W) × 103.6(H) mm³, 2.3 kg

POWER SUPPLY (PSU-SR)



188(L) × 145(W) × 83(H) mm³, 1.2kg