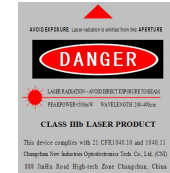




MPL-U-xxx-SU series

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 marking, carving, measure, research and so on.



SPECIFICATIONS

Wavelength (nm)		946±1	1047±1	1053±1
Operating mode		Q-switched pulsed laser		
Max average power (mW)*		1~150	1~300	1~450
Single pulse energy (μJ)		1~20	1~150	1~50
Pulse duration (ns)		~5	~10	~10
Peak power (kW)		0.1~2	0.1~15	0.1~5
Rep. rate (kHz)	INT FIXED (One internal fixed rep.rate)	1Hz-4kHz (Optional)	1Hz-1kHz (Optional)	
	EXT TRIG (External triggered)	1Hz-4kHz	1Hz-1kHz	
	QCW	Between 5k-9kHz	Between 2k-5kHz	
Ave power stability (over 4 hours)		<5%, <3%	<5%, <3%, <2%	
Transverse mode		TEM <sub>00</sub>		
M <sup>2</sup> factor		<2.0		
Beam diameter at the aperture (mm)		~1.2		
Beam divergence, full angle (mrad)		<2.0		
Warm-up time (minutes)		<5		
Beam height from base plate (mm)		27.4		
Operating temperature (°C)		10~35		
Power supply (90-264VAC)		PSU-H-FDA/ PSU-SR		
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)	1064±1				1313±1			1319±1		1444±1		
Operating mode	Q-switched pulsed laser											
Max average power (mW)*	1~2000				1~100			1~150		1~10		
Single pulse energy (μJ)	1~20				20~50	50~100	35~200	1~20		1~15		
Pulse duration (ns)	~1.3	3~5	5~10	10~25	~1.5	~1.8	~5	~15			~24	
Peak power (kW)	0.8~15	0.3~4	0.2~2	0.1~0.8	13~33	27~55	7~40	0.06~1.33		0.06~1.0		
Rep. rate (kHz)	INT FIXED (One internal fixed rep.rate)				1Hz-4kHz (Optional)						/	
	EXT TRIG (External triggered)				1Hz-4kHz						/	
	QCW				Between 5k-20kHz						Between 4k-7kHz	
Ave power stability (over 4 hours)	<3%, <2%, <1%				<5%, <3%, <2%				<5%, <3%			
Transverse mode	TEM <sub>00</sub>											
M <sup>2</sup> factor	<2.0											
Beam diameter at the aperture (mm)	~1.2											
Beam divergence, full angle (mrad)	<2.0											
Warm-up time (minutes)	<5											
Beam height from base plate (mm)	27.4											
Operating temperature (°C)	10~35											
Power supply (90-264VAC)	PSU-H-FDA/ PSU-SR											
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	POWER SUPPLY (PSU-H-FDA)	POWER SUPPLY (PSU-SR)
<p>160(L)×60(W)×50(H) mm<sup>3</sup>,0.9kg</p>	<p>276.6(L)×145(W)×103.6(H) mm<sup>3</sup>, 2.3 kg</p>	<p>188(L)×145(W)×83(H) mm<sup>3</sup>, 1.2kg</p>