

DATA SHEET

MPL-III-1064/10~20uJ/1~500mW

LD PUMPED ALL-SOLID-STATE **Q-SWITCHED LASER** AT 1064 nm

All solid state Q-switched laser at 1064nm 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 532nm, 355nm, or 266nm laser. fiber communication, etc.





SPECIFICATIONS

Wavelength (nm)		1064±1			
Operating mode		Q-switched pulsed laser			
Max average power (mW)		200	500		
Single pulse energy (µJ)		10~20			
Pulse duration (ns)		~1.3	3~5	5~10	10~25
Peak power (KW)		~10	~5	~3	~1
Rep. rate (kHz)	Controllable	Specified One rep. rate, such as 1k, 2k, 3k, up to 4kHz, with stable laser pulses emitting (stable pulse energy, peak, duration and period).			
		Different rep. rate in the range of 1Hz-4kHz can be obtained by input an external TTL signal.			
	Uncontrollable	Undefined rep. rate among 5k-20kHz and unstable laser pulse emitting. Suitable for the applications only needing high peak power pulses.			
Average power (mW)		Average power (mW) = Single pulse energy (μ J) * Rep. rate (kHz)			
Ave power stability (over 4 hours)		<1%, <3%, <5%			
Transverse mode		TEM_{00}			
Warm-up time (minutes)		<10			
M ² factor		<1.2			
Beam divergence, full angle (mrad)		<1.5			
Beam diameter at 1/e ² (mm)		~1.2			
Beam height from base plate (mm)		24.8			
Operating temperature ($^{\circ}$ C)		10~35			
Power supply (90-264VAC)		PSU-III-FDA			
Expected lifetime (hours)		10000			
Warranty		1 year			
Remarks		Average power of 1~2mW UV laser at 266nm or 355nm can be generated by MPL-III-1064 or MPL-III-532.			





