## Opto Engine LLC

**Data sheet** 

Rev. 2102

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

Central wavelength (nm)		1064±1				
Operating mode		Q-switched pulsed laser				
Max average power (mW)		200	500	500		
Single pulse energy (µJ)		10~20				
Pulse duration (ns)		~1.3	3~5	5~10	10~25	
Peak power (W)		7000~15000	2000~6000	1000~4000	400~2000	
Rep. rate (kHz)	FIXED	Setting up one fixed rep. rate internal between 1Hz-4kHz with stable pulse energy, pulse duration and pulse period.				
	EXT TRIG	1Hz-4kHz by external trigger with stable pulse energy, pulse duration and pulse period.				
	QCW	QCW state with one rep. rate between 5kHz-20kHz.				
Average power (mW)		Average power (mW) = Single pulse energy (μJ) * Rep. rate (kHz)				
Ave power stability (over 4 hours)		<1%, <2%, <3%				
Transverse mode		$TEM_{00}$				
Warm-up time (minutes)		<10	<10			
M <sup>2</sup> factor		<1.2	<1.2			
Beam divergence, full angle (mrad)		<1.5	<1.5			
Beam diameter at 1/e <sup>2</sup> (mm)		~1.2	~1.2			
Beam height from base plate (mm)		24.8	24.8			
Operating temperature (°C)		10~35	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.			





