## Opto Engine LLC

**Data sheet** 

Rev. 2102

**MPL-H-1064**/20~100uJ/500~1500mW



## LD PUMPED ALL-SOLID-STATE Q-switched LASER

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 355nm, or 266nm laser, fiber communication, etc.









## **SPECIFICATIONS**

Central wavelength (nm)		1064±1	
Operating mode		Q-switched pulsed laser	
Output power (mW)		500~1500	~400
Single pulse energy (µJ)		20~100	~40
		Average power (W) = Single pulse energy (mJ) * Rep. rate (kHz)	
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-30kHz.	
Pulse duration (ns)		~10	~1.5
Peak power (W)		2000~10000	~27000
Ave power stability (over 4 hours)		<1%, <2%, <3%	
Transverse mode		$TEM_{00}$	
Warm-up time (minutes)		<10	
M <sup>2</sup> factor		<1.5, <1.2	
Beam divergence, full angle (mrad)		<1.8	
Beam diameter at the aperture (mm)		~1.5	
Beam height from base plate (mm)		29	
Operating temperature (°C)		10~35	
Power supply (90-264VAC)		PSU-H-FDA	
Expected lifetime (hours)		10000	
Warranty		1 year	
Remarks		UV laser at 266nm or 355nm can be generated by MPL-H-1064 or MPL-H-532 by frequency doubler.	





