



# Lasertack New Laser Generation

MPL-H-1047/50~150uJ/1-300mW



## LD PUMPED ALL-SOLID-STATE Q-SWITCHED LASER AT 1047 nm

All solid state Q-switched laser at 1047 nm 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, fiber communication, etc.



### SPECIFICATIONS

Central wavelength (nm)		1047±1
Operating mode		Q-switched pulsed laser
Single pulse energy (μJ)		50~150
Pulse duration (ns)		~6
Peak power (W)		8400~25000
Rep. rate (kHz)	Controllable	Specified One rep. rate, such as 0.1Hz, 100 Hz, 500 Hz up to 1kHz, with stable laser pulses emitting (stable pulse energy, peak, duration and period). Different rep. rate in the range of 0.1Hz to 1kHz can be obtained by input an external TTL signal.
	Uncontrollable	Undefined rep. rate among 2kHz-3kHz and unstable laser pulse emitting. Suitable for the applications only needing high peak power pulses.
Average power (mW)		Average power (mW) = Single pulse energy (μJ) * Rep. rate (kHz)
Ave power stability (over 4 hours)		<1%, <3%, <5%
Transverse mode		TEM <sub>00</sub>
Warm-up time (minutes)		<10
M <sup>2</sup> factor		<1.5
Beam divergence, full angle (mrad)		<2.0
Beam diameter at 1/e <sup>2</sup> (mm)		~3.0
Beam height from base plate (mm)		29
Operating temperature (°C)		10~35
Power supply (90-264VAC)		PSU-H-FDA
Expected lifetime (hours)		10000
Warranty period		1 year



MxL-H-1047	PSU-H-FDA
<p>154.5(L)×77(W)×60(H) mm<sup>3</sup>, 0.9 kg</p>	<p>236(L)×145(W)×104(H) mm<sup>3</sup>, 2.3 kg</p>