

Features

- Compact size, easy for system integration
- Diode pumped with 1 billion shots lifetime
- Air-cooling, without maintenance
- Electro-optic Q-switching with low jitter
- 532,355 and 266nm available
- Suitable for 24/7 continuous operation
- Pulse energy up to 80mJ@20Hz, 100mJ@10Hz@1064nm

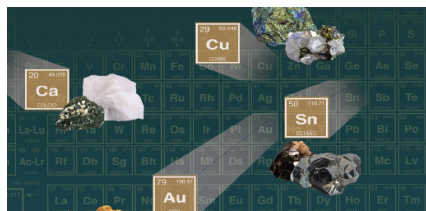
Applications

- Laser Induced Breakdown Spectroscopy (LIBS)
- LIDAR
- Laser Induced Fluorescence (LIF)
- Laser Cleaning
- Spectrometry Analysis
- LCD Repair
- Optic Damage Testing

Air-Cooled EO Q-Switched Laser

The Lapa series lasers are a new generation of air-cooled, DPSS lasers. They offer fundamental energy output of 100mJ, repetition rates from 1-20Hz, and pulse widths of less than 10ns. Frequency doubling to 532nm, tripling to 355nm, and quadrupling to 266nm are available options. These products feature excellent long-term reliability and environmental adaptability, making them ideal for applications such as LIBS, LiDAR, and panel laser repair.

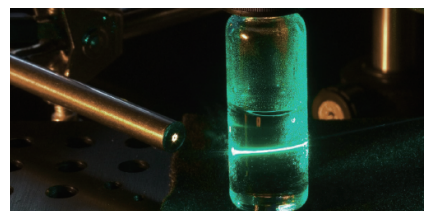
This series employs uniform pumping technology, conduction cooling technology, and DC power supply, among other innovative solutions, making it a truly portable nanosecond laser source. Suitable for 24/7 continuous operation, it provides new solutions for scientific, industrial, and military applications.



LIBS



LIDAR



LIF



Beamtech Optronics Co., Ltd.
<http://www.beamtech-laser.com>
 Head Office
 15566 Buena Vista Ave, White Rock, BC V 4B 1Z2, Canada
 phone: 604-960-1429
 Email: beamtech@shaw.ca

Manufacture & Technology Center
 Building B, Hongfu Technology Park,
 Changping Beijing, China 102209
 Tel: 010-84945016/17/18/19
 Fax: 010-84945020



Specifications

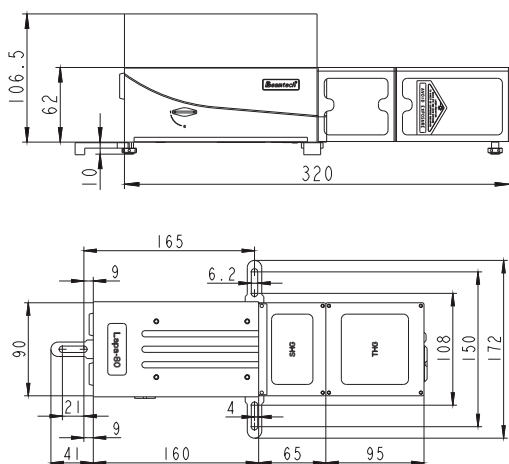
Models ¹		Lapa-80	Lapa-100
Repetition Rate		1-20Hz	1-10Hz
Pulse Energy:	1064nm	80mJ	100mJ
	532nm	50mJ	50mJ
	355nm	25mJ	25mJ
	266nm	10mJ	10mJ
Energy Stability ² (RMS)	1064nm	≤0.5%	≤0.5%
	532nm	≤1%	≤1%
	355nm	≤2%	≤2%
	266nm	≤3%	≤3%
Pulse Width ³		≤8ns	≤8ns
Divergence ⁴		≤1mrad	≤1mrad
Pointing Stability (RMS)		≤10μrad	≤10μrad
Beam Diameter ⁵		4.5mm	4.5mm
Polarization(1064nm)		Linear(Horizontal)	Linear(Horizontal)
Jitter ⁶ (RMS)		≤0.5ns	
Cooling		Air	
Power dissipation		220W	
Electrical Service		100-240V-50/60Hz-10A, or DC 24V-9.2A	

1. All specifications, unless otherwise stated, are for Q-switched 1064nm operation and are subject to change without notice;

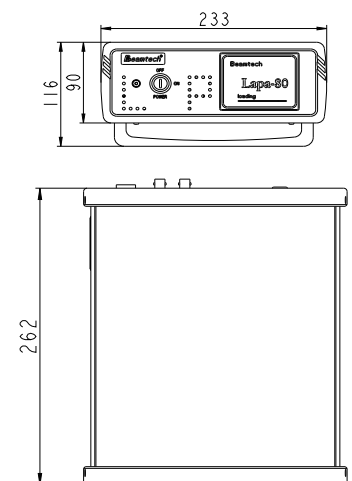
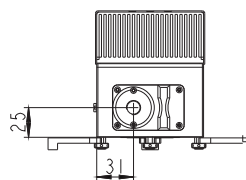
2. Dev.to average (shot to shot for 99% of pulses). Data is measured at room temperature 15-30 °C.
For 532nm & 266nm output, the crystal of SHG is KTP with Energy Stability ≤ 1% at 532nm;
For 355nm output, the crystal of SHG is LBO with Energy Stability ≤ 1.5% at 532nm.

3. Full width half max (FWHM);
4. Full angle measured at 1/e² of the peak;
5. Measured at the laser output;
6. With respect to external trigger;

Dimensions



Lapa-80/100



Power Supply