



Vlite-Hi-532 series laser



Features

- Max. average power: 120W @ 10kHz
- Adjustable repetition rate: 1-30kHz
- Pulse width: Hundreds of ns
- Dual-channel pulse output available
- Supports 24/7 continuous stable operation

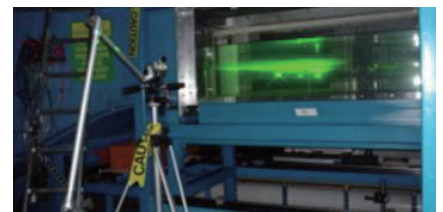
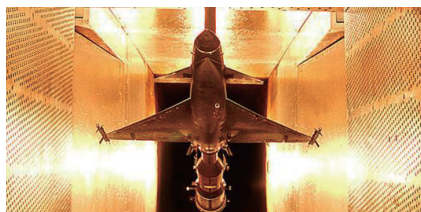
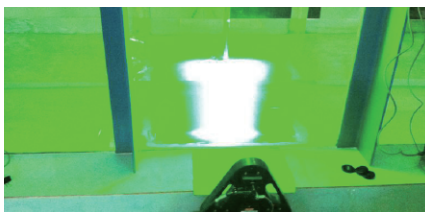
High Repetition Rate Dual-Pulse DPSS PIV Laser

The Vlite-Hi-532 series utilizes a CW diode-pumped Nd:YAG gain medium to deliver high-frequency pulsed green light output through acousto-optic (AO) Q-switching and efficient intracavity frequency doubling technology. It features a maximum single-pulse energy of 12mJ @ 10kHz, an average power of 120W, and an adjustable repetition rate from 5kHz to 30kHz.

Compared to the Vlite-Hi-527 series, the Vlite-Hi-532 offers a higher repetition rate, making it ideal for high-speed Particle Image Velocimetry (PIV) and as a pump source for high-frequency Ti:Sapphire amplifiers. Furthermore, the laser incorporates a rugged industrial design with a consistent form factor and standardized electrical interfaces, facilitating easy system integration.

Applications

- Material Processing
- Micro PIV
- 2D/3D PIV
- Tomographic PIV



Beamtech Optronics Co., Ltd.
<http://en.beamtech-laser.com>

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



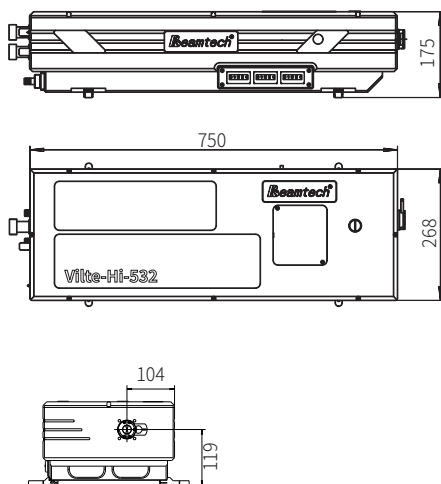
Specifications

Models	Vlite-Hi-532-80	Vlite-Hi-532-100	Vlite-Hi-532-120
Wavelength	532nm±0.5nm		
Average power	2*80W@10kHz	2*100W@10kHz	2*120W@10kHz
Pulse Energy	2*8mJ@10kHz	2*10mJ@10kHz	2*12mJ@10kHz
Pulse Width ¹	<150ns@10kHz		
Repetition Rate	1kHz-30kHz		
Energy Stability ² (RMS)	<1%(RMS)		
Laser mode	Multi-mode		
Beam Diameter ³	4mm	5mm	5mm
Spot Ellipticity	>85%		
M ²	~20		
Divergence ⁴	<10mrad		
Pointing Stability(RMS)	<20μrad		
Power Consumption	1.5kW*2	2kW*2	2kW*2
Chiller Power Consumption / Cooling Capacity	3kW/4kW	4kW/5kW	4kW/5kW
Ambient Temperature	15-30 C		
Preheating Time	<5min		
Umbilical Length	3m		

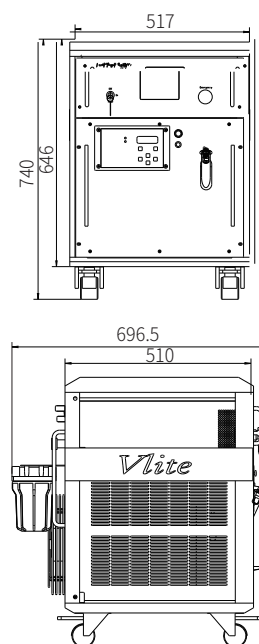


1. Full width half max (FWHM).
2. Dev. to average (shot to shot for 99% of pulses).
3. Measured at the laser output.
4. Full angle at 1/e² of the peak.

Dimensions



Vlite-Hi-532



Power Supply & Cooling System