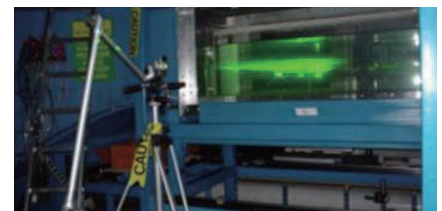
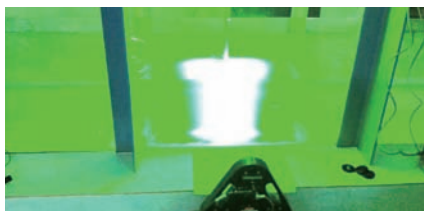




Dual-cavity laser for PIV

Vlite series is high-energy dual-cavity green laser designed specifically for 2D/3D PIV, Tomographic PIV and Micro PIV application field including marine life research, aerodynamics, agitation dynamics, the steel industry and combustion fields. Vlite series lasers have been developed since 2000. In 2014, this series lasers passed the CE certification.

Vlite series features high energy (ranges from 135mJ to 500mJ) and continuously adjustable frequency (0-15Hz) which is better to match with different working frequencies of camera. The ultra-uniform beam profile and design of thermal insensitive resonator enable the flow field illumination more uniform. Beam combination stability is a key concern in mechanical design, while beam uniformity of each cavity is a key concern in optical design. The integration design of laser head and beam delivery arm provides more convenience for customer. In addition, Vlite series also equips with multiple light sheet optics.



All images from Website and Customers

Features

- Output energy: 135mJ, 200mJ, 380mJ, 500mJ optional
- Frequency continuously adjustable: 0-15Hz
- Compact, efficient and stable design
- High beam combination stability of two cavities
- Ultra-uniform beam profile
- Jitter<1ns, high measurement accuracy
- Compatible with a variety of PIV systems

Applications

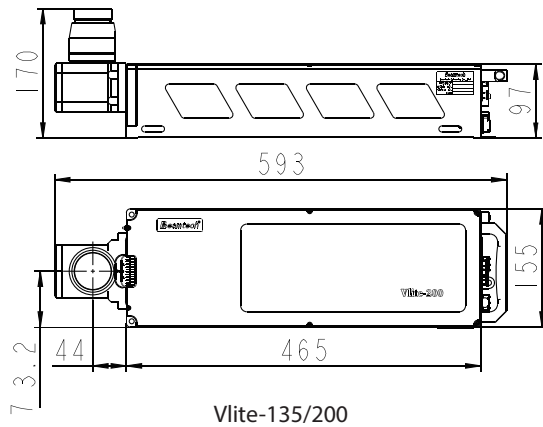
- Micro PIV
- 2D/3D PIV
- Tomographic PIV

Specifications

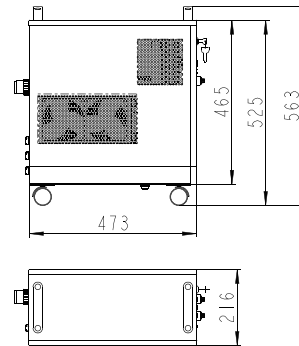
Models	Vlite-135	Vlite-200	Vlite-380	Vlite-500
Wavelength	532nm			
Repetition Rate	0-15Hz	0-15Hz	0-10Hz	0-10Hz
Pulse Energy	135mJ	200mJ	380mJ	500mJ
Energy Stability ¹ (RMS)	≤2%	≤2%	≤2%	≤2%
Pulse Width ²	6-8ns	6-8ns	6-9ns	6-9ns
Divergence ³	≤3mrad	≤3mrad	≤1mrad	≤1mrad
Pointing Stability	≤50μrad			
Jitter ⁴ (RMS)	<1ns			
Beam Diameter ⁵	7mm	7mm	9mm	9mm
Near Field Beam Profile	Flat-top, Uniform			
Spectral Purity	≥99.8%			
Cooling	Air to water			
Electrical Service	220V-50/60Hz-10A			
Power Consumption	700W	700W	1600W	1600W
Umbilical Length	3m			
Light Arm(Optional)	7 Joints ,1.8m			

- i 1. 100% Pulse to Pulse energy stability measured over 1 hour;
- 2. Full width half max (FWHM);
- 3. Full angle measured at 1/e² of the peak;
- 4. With respect to external trigger;
- 5. Measured at the laser output;

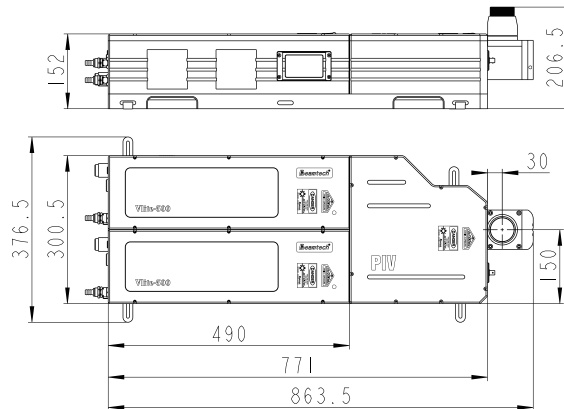
Dimensions



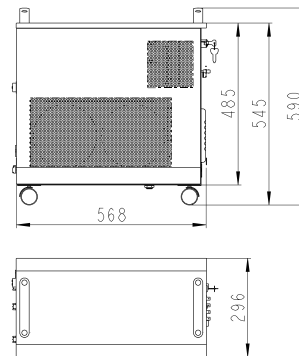
Vlite-135/200



Power Supply & Cooling System



Vlite-380/500



Power Supply & Cooling System