

Press Release

LABest Exclusive Distributor Agreement

VioSense Corporation



### **VioSense Corp. to supply pulsed Nd: YAG Dual-cavity lasers for PIV and other scientific applications**

**VioSense Corporation** (Pasadena, CA) is pleased to announce the agreement with **LABest Optronics Co. Ltd.** (Beijing, China) to serve as Exclusive Distributor in North America of their line of Nd: YAG Dual-cavity lasers for PIV flow diagnostics and other scientific applications.

Dual-cavity pulsed YAG lasers are used for particle image velocimetry, a measurement technology for quantitative visualization of fluid flows, in a plane or a volume. The LABest (pronounced, “LABest,” for “Laser Application Best”) lasers have a strong international record of accomplishment and competitive features.



### **Features**

#### **High power**

LABest PIV lasers are rated up to 1 Joule per pulse; making them the highest power PIV lasers available on the market. Higher power translates directly to superior ease-of-use and increased signal-to-noise ratio, the key to successful PIV measurements.

#### **Unibody construction**

LABest lasers are built using an integrated aluminum housing for strength and rigidity. This feature helps maintain stable alignment.

## Features, cont.

### **Compatible beam delivery arm**

The LABest lasers feature an integrated beam delivery arm (see photo, above) to couple the beam to light sheet and light volume optics. This makes it easy to position the PIV illumination.

### **External alignment**

Beam alignment is carried-out from outside the laser housing, making it easy to align and eliminates safety hazards.

### **Lower cost**

LABest PIV lasers offer superior value!

*“The LABest – VioSense partnership leverages both company’s assets.” remarked VioSense CEO, Dr. Darius Modarress, “High quality and superior specs from LABest, an extensive customer network and complementary products from VioSense. We are excited about this new agreement and look forward to helping our clients meet their most challenging whole-field flow measurement objectives.”*

## System specifications

Description	Vlite-50	Vlite-100D	Vlite-200D	Vlite-350D	Vlite-500D	Vlite-1000D
Energy: 532 nm	>50 mJ	>100 mJ	>200 mJ	>350 mJ	>500 mJ	>1000 mJ
Repetition Rate:	1-20 Hz	1-15 Hz	1-15 Hz	1-10 Hz <sup>1</sup>	1-10 Hz <sup>2</sup>	1-10 Hz
Spot Size	4mm	5mm	6mm	6mm	9mm	10mm
Divergence:	<1mrad	<1mrad	<1mrad	<1mrad	<1mrad	<1mrad
Spatial Mode:	TEM <sub>00</sub>	TEM <sub>00</sub>	TEM <sub>00</sub>	TEM <sub>00</sub>	TEM <sub>00</sub>	TEM <sub>00</sub>
Energy Stability:	≤ ±3%	≤ ±3%	≤ ±3%	≤ ±3%	≤ ±3%	≤ ±3%
Pulse Width:	6-8ns	6-8ns	6-8ns	6-8ns	6-8ns	6-8ns
Power Drift:	<5%	<5%	<5%	<5%	<5%	<5%
Jitter:	<2ns / 6ns (option)	<2ns / 6ns (option)	<2ns / 6ns (option)	<2ns / 6ns (option)	<2ns / 6ns (option)	<2ns / 6ns (option)
Chiller	Internal closed-loop chiller					
Electrical Service:	220VAC-Single Phase-10A				220VAC-Single Phase-15A	
Dimension (laser head ) :	700 x 252 x 145(mm)				Custom Design	

1) Vlite-350D provides 200 mJ energy per pulse at 15Hz

2) Vlite-500D provides 350 mJ energy per pulse at 15Hz

All specifications subject to change without notice.



VioSense is a Caltech Technology Transfer Company™ and JPL Technology Affiliate™

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