









The bernoulli™ PIV from Litron is the most advanced 'plug and play' PIV laser system available today. It benefits from Litron's years of experience in this field and the expertise gained from being the World's leading PIV laser manufacturer.



# Lower the pressure in your PIV experiments.

True turnkey operation and rugged construction, the Litron **bernoulli**™ is suited to operation in almost any environment.

#### Rugged

**Vibration and shock proof** - for use in rough environments. **Fully sealed laser head** – protection from dust and moisture. **Ruggedized oscillator** – fixed mirror design adds to oscillator alignment stability.

#### Reliable

- 2 Year warranty includes Optics, PSU & Laser head.
- 2 Year warranted alignment and overlap All components locked into position in a separate compartment.

#### **Portable**

Ability to operate in all orientations.

**Compact size** – strengthened and lightened aluminium monolithic body. **Fast connections at the laser head and PSU** – easy to transport and set-up.

#### Intelligent

**MOBIUS™** - Microprocessor control and monitoring of all laser parameters. **Standardised PSU** – Mobius<sup>™</sup> configures the PSU to the laser head. **Accurate internal pulse generator** – No third party timing equipment required.

#### Easy to Use - and Fast!

From crate to lasing in under 8 minutes.

Auto start up and touch screen control.

**LUCi™ remote interface** - provides all functions at the touch of a button.

Motorised attenuator fitted as standard – 1000 step energy control.

**Alignment mode** - sets attenuator to allow alignment of external optics.



#### PERFORMANCE SPECIFICATION

| Model   | B-PIV 200-15   | B-PIV 145-15 | B-PIV 120-20 | B-PIV 100-25 |
|---|--|--------------|--------------|--------------|
| Wavelength (nm)   | 532nm  |              |              |              |
| Pulse repetition rate (Hz) Pulse energy @ 532nm (mJ) <sup>(1)</sup>   | 0-15<br>200  | 0-15<br>145  | 0-20<br>120  | 0-25<br>100  |
| Pulse to pulse energy stability (%pk-pk) Pulse width (ns) <sup>(2)</sup> Near field beam diameter (mm) Beam divergence (mrad) <sup>(3)</sup> Shot to shot pointing stability (µrad) Far field beam overlap (µrad) Near field beam overlap (µm) Polarisation Spectral Purity (%) | <pre>&lt;2</pre>   |              |              |              |
| System requirements  Power input (VAC)  Operating ambient (°C)  Storage ambient (°C) (4)  Coolant  External trigger  Standard umbilical length (m)  | 110-250 (50-60Hz)<br>10 to 30<br>5 to 50<br>Deionised Water<br>5V TTL<br>2.5 |              |              |              |

- (1) Per laser at maximum rep. rate.
- (2) At maximum energy 532nm (FWHM)
- (3) Full angle for 90% of the output energy.
- (4) All cooling water removed.

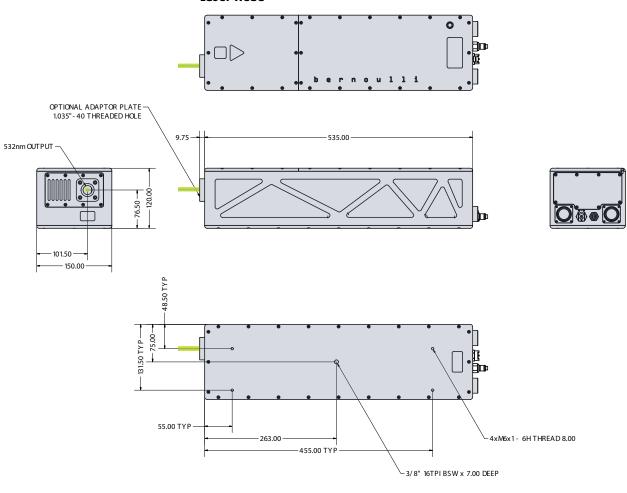
**High Frequency Options** - 50Hz and 100Hz variants are also available.





#### **DIMENSIONAL SPECIFICATION**

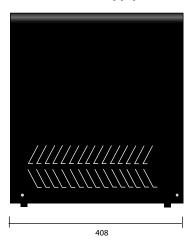
## **Laser Head**



#### **LPU550 Power Supply**

### **LUCi Romote Controller**







#### Litron Lasers Ltd

8 Consul Road, Rugby, Warwickshire CV21 1PB. England.

T +44 (0)1788 574444 F +44 (0)1788 574888 E sales@litron.co.uk

North America & Canada T +1 (406) 522 7566 F +1 (406) 522 7567 E sales@litronlasers.com

