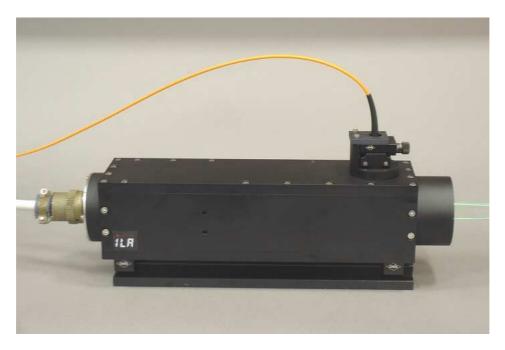
# fp50-shift LDA system



fp50-shift LDA probe

### **Benefits:**

- High system stability
- High laser power to the measuring volume
- Upgradeable to 2D
- No sending optical fibers
- Transportable without loss of adjustment

The new fp50-shift LDA system integrates the laser source, frequency shifting and optics in a single compact probe. There are no optical fibers to transport the beams from the Laser to the probe optics, so almost all of the Laser energy is transmitted to the measurement volume.

When comparing with common fiber-based LDA systems, this approach has the advantage of a high available illumination power offered at a very competitive price.

The fp50-shift is designed with robustness and stability in mind. All optical elements, such as Bragg cells and prisms, are factory-aligned and fixed, with no need for in-use readjustment.

In common with all LDA systems from ILA, the fp50-shift is operated via the proven and user-friendly *flowPOINT* software interface.



# **Features**



#### Probe:

- Integrated Nd:YAG laser head
- Laser power 75, 100, 150 or 200 mW
- Fixed optical path length compensated beam splitters
- Integrated Bragg cell
- · Receiving fiber
- Focal length: 250 mm, 400 mm
- Beam distance: 45 mm
- Upgradable to 2D

#### Controller:

- 1D-Controller in 19" rack with integrated PC and 200 MHz Spectral Analysis Module
- Controller: fiber based, for analog signal preprocessing including power supply for photomultiplier
- Spectral Analysis Module: two channel A/D-converter, sampling rate each channel up to 200 MHz, 8 Bit, input range +/-200 mV, +/-500 mV, +/-1 V
- Specification for f=250 mm: velocity range 0...150 m/s

## **Accessories:**

- Traversing units (up to 5 axes, displacements from 200...2000 mm)
- Traversing software integrated in flowpoint
- Phase correlation module
- Beam expander



