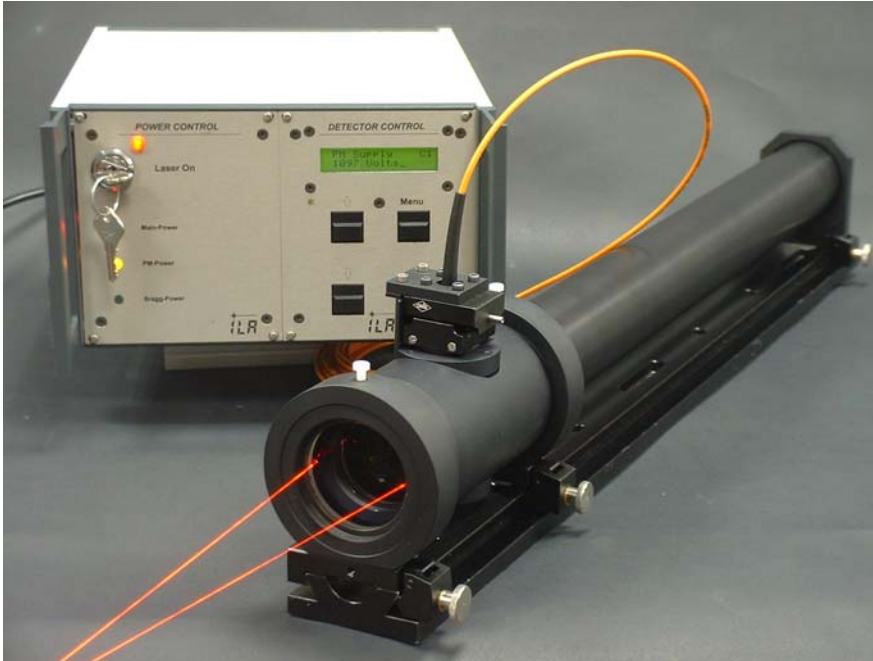


## fp50fus LDA system



The fp50fus LDA probe

### **BENEFITS:**

- **High system stability**
- **High accuracy**
- **unshifted**
- **For calibration applications**
- **Transportable without loss of adjustment**

The fp50fus LDA system is specially designed for calibration applications. The Laser and all optical elements are rigidly fixed inside the probe. There are no optical fibers to guide the beams from the Laser to the probe optics, so almost all of the Laser energy is transmitted to the measurement volume. As a result this probe combines a high measuring accuracy (0,2%) with a high system stability over years, and so is commonly used as a primary standard to calibrate sensors such as hot wire anemometers, cup anemometers, propeller anemometers etc. With a large cost advantage over conventional LDA systems, the fp50fus is often used in universities and advanced technical colleges for educational and scientific research work.

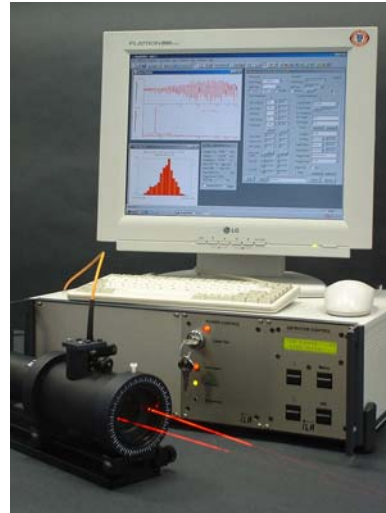
In common with all LDA systems from ILA, the fp50fus is operated via the proven and user-friendly *flowPOINT* software interface.



## FEATURES

### Probe:

- Integrated HeNe Laser head
- Laser power 10 or 22mW
- Fixed optical path length compensated beam splitters
- No frequency shift
- Focal length: 250mm, 400mm
- Beam distance: 45mm
- accuracy 0,2% for  $f=250\text{mm}$



### Controller:

- 1D-Controller in 19" rack with integrated PC and 50 MHz Spectral Analysis Module
- Controller: fiber-based, includes analogue signal pre-processing and red-enhanced photo-multiplier with its power supply
- PC: standard PC or optionally integrated in 19" rack (500 MHz, 20 GB HD, 256 MB RAM, incl. 15" TFT)
- Spectral Analysis Module: two channel A/D-converter, sampling rate up to 50 MHz per channel, 8 Bit, input range +/-50mV, +/-100mV, +/-200mV, +/-500mV, +/-1V,
- Velocity range for  $f=250\text{mm}$ : 0,005-80m/s

### Accessories

- Traversing units (up to 5 axes, displacements from 200 to 2000mm)
- Traversing software integrated in *flowPOINT*
- Phase correlation module

### Accuracy Certification

- We offer on request a calibration certificate for the accuracy (deviation of the fringe distance inside the measuring volume) from the Physikalisch Technische Bundesanstalt (PTB).

