

## IPS SAM

Instrument for aircraft emission measurements

Measuring range 0,4  $\mu\text{m}$  - 300  $\mu\text{m}$

### Intended use:

- \*particle quantity and particle size one-dimensional measurements - according to maximum particle size
- \*online PM 10, PM 2.5 and other measurements in the air independently of air physical and chemical properties
- \*measurements directly behind the jet engine, in speedy stream of combustion gases - up to 200 m/s
- \*there is a possibility of on board installation in aircrafts and helicopters

### Measuring method:

- \*optoelectronic measuring method employing light scattering phenomenon
- \*preliminary measurement within 4096 dimensional classes
- \*calibrated measurement within 256 equally sized dimensional classes or 11 unrestricted, user defined classes
- \*full simulation of sieve analysis according to Elsieve method (patent no. 205738)
- \*coincidence analysis
- \*500 kHz frequency of particle scanning
- \*a diffuser reducing the isokinetic speed of particle collection
- \*an aerodynamic system of sample suction drive

### Specification:

- \*measuring sensor with infrared diode or laser diode
- \*inlet diffuser
- \*mini-compressor for particle pneumatic transportation
- \*outlet reducer
- \*electronic measuring system
- \*notebook computer with dedicated software
- \*the head made of duralumin, the console of stainless steel, the analyser weight 16 kg

### We provide:

- \*training
- \*technical support
- \*validation
- \*warranty and post-warranty technical service
- \*a software tool adapted to user needs and making possible to optimize the tested process

