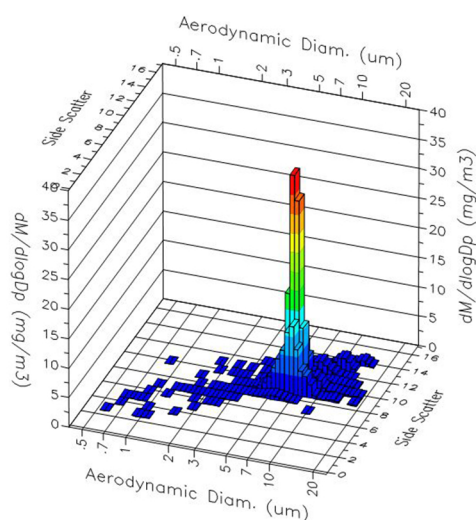


## SPECIFICATION

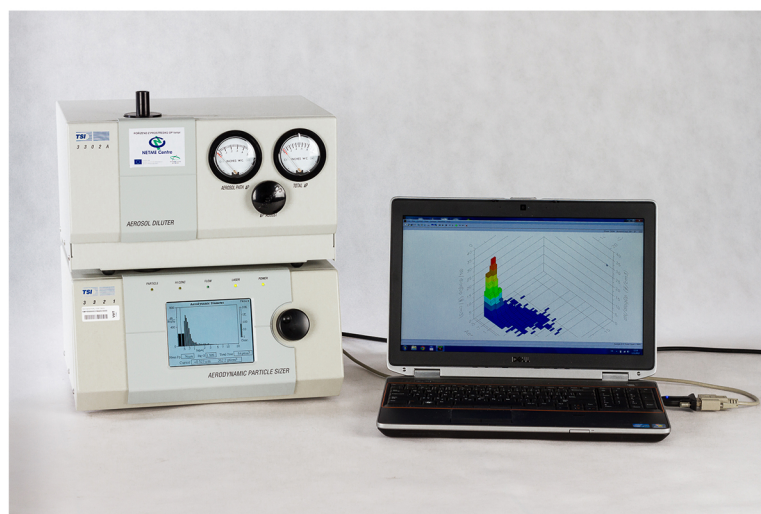
- real-time measurement of the aerodynamic particle diameter ranging from  $0.5\ \mu\text{m}$  to  $20\ \mu\text{m}$  at high resolution within the entire range
- simultaneous measurement of scattered light intensity over the equivalent particle size range between  $0.4\ \mu\text{m}$  and  $20\ \mu\text{m}$
- measurable particle concentration range from 0.001 to 10,000 per  $\text{cm}^3$
- particle type: atmospheric solid aerosols and non-volatile liquid aerosols
- resolution of the aerodynamic diameter  $0.02\ \mu\text{m}$  and  $0.03\ \mu\text{m}$  for particle size of  $1.0\ \mu\text{m}$  and  $10\ \mu\text{m}$ , respectively
- maximum measuring frequency greater than 200,000 particles per second
- programmable sampling period from 1 second to 18 hours per sample
- Aerosol Instrument Manager Software for measurement and data analysis
- compatible aerosol dilutor TSI 3302A is available
- Aerodynamic Particle Sizer can be combined with Scanning Mobility Particle Sizer Spectrometer (available at the department)



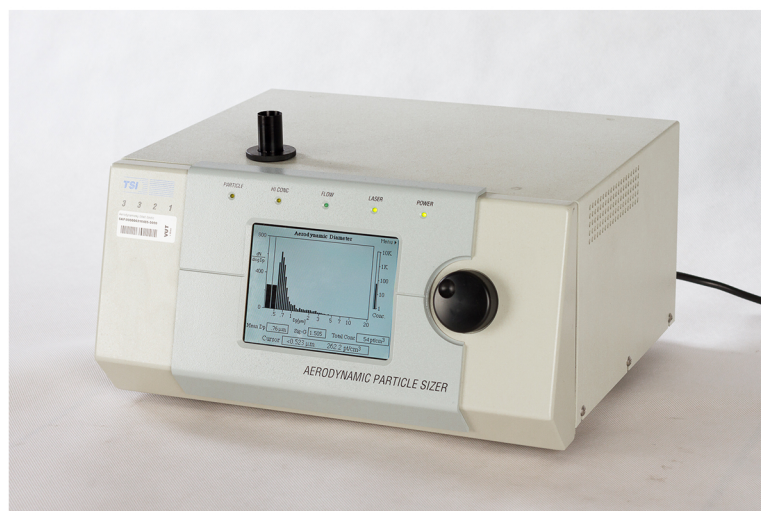
■ Result of measurement of monodisperse particles

# Aerodynamic particle sizer TSI – APS 3321

The aerodynamic particle sizer TSI 3321 is a device for accurate measurement of aerodynamic diameter of aerosol particles. It is a compact and portable general purpose apparatus applicable to measurement of aerosol particle size under laboratory and field operating conditions. The aerodynamic diameter measurement is based on a sophisticated 'time-of-flight' technique. It is a size characteristics of a particle that determines the particle motion behaviour when suspended in the air. The sizer measures simultaneously the aerodynamic diameter and the equivalent diameter, the latter based on scattered light intensity.



■ Aerodynamic particle sizer with dilutor TSI 3302A



## TYPICAL APPLICATIONS

- filter and air-cleaner testing
- studies in inhalation toxicology and drug delivery
- research on biologic aerosols
- atmospheric studies
- ambient air monitoring
- indoor air quality testing
- measurement of particle size and aerosols for further testing