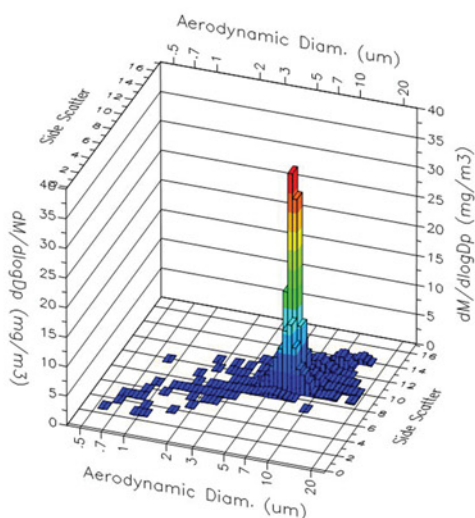


Aerodynamic particle sizer TSI – APS 3321

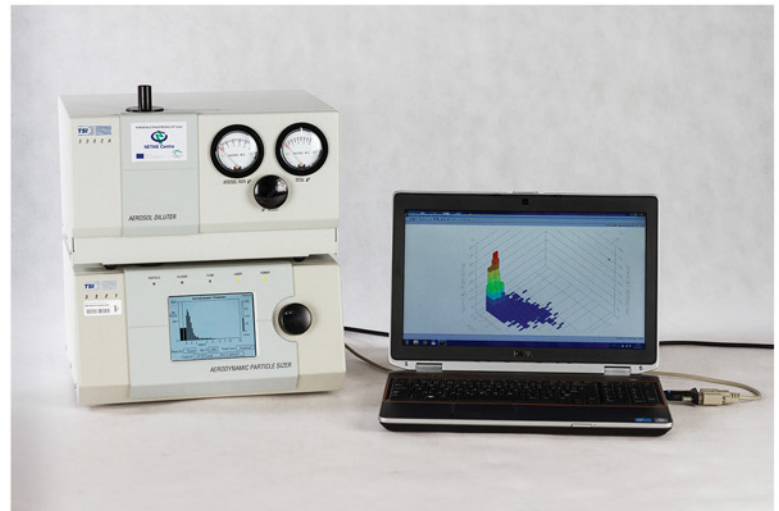
The aerodynamic particle sizer TSI 3321 is a device for accurate measurement of aerodynamic diameter of aerosol particles. It is a compact and portable general purpose apparatus applicable to measurement of aerosol particle size under laboratory and field operating conditions. The aerodynamic diameter 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.

SPECIFICATION

- real-time measurement of the aerodynamic particle diameter ranging from 0.5 μm to 20 μm at high resolution within the entire range
- simultaneous measurement of scattered light intensity over the equivalent particle size range between 0.4 μm and 20 μm
- measurable particle concentration range from 0.001 to 10,000 per cm^3
- particle type: atmospheric solid aerosols and non-volatile liquid aerosols
- resolution of the aerodynamic diameter 0.02 μm and 0.03 μm for particle size of 1.0 μm and 10 μm , 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 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

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