

# Scanning Mobility Particle Sizer™ Spectrometers

## Model 3938

Our most versatile submicrometer particle sizers provide the highest resolution and accuracy available.

TSI® Scanning Mobility Particle Sizer™ (SMPS™) systems have advanced to the standard reference in sizing and counting of airborne nanoparticles. The US National Institute of Standards and Technology (NIST), and many other reference laboratories worldwide use the TSI® SMPS™. It is compliant with the ISO 15900:2009 standard.

It is routinely installed in environmental monitoring stations, filter testers, academic and industrial laboratories. The model 3938 features a selection of modules, which are automatically recognized during setup. It can achieve scan times of as low as 10 seconds while providing a very high size resolution.

Collectively, our series 3938 SMPS spectrometers measure particles from 1 to 1,000 nm. They display data up to 128 channels per decade, having up to 200 actual size channels in a single scan. A very wide concentration range is covered, from 1 to 10,000,000 particles/cm<sup>3</sup>, depending on CPC model.

Users may choose among four DMAs, five CPCs, and two different neutralization techniques. This versatility enables you to select a system that best fits your sizing requirements. The Electrostatic Classifier actively measures sheath flow temperature and pressure so that the sheath flow rate stays stable under a variety of conditions.

The components can be combined into a standalone electrostatic classifier for experiments involving monodisperse aerosol generation or measuring the size distribution and counting the total number of particles.

The end result is an unmatched, proven solution for research involving combustion, atmospheric aerosols, indoor air quality, filter testing, and much more.

When an SMPS is coupled with an OPS or APS, the continuous measurement range can be extended up to 10 µm or 20 µm, respectively. Paired with a QCM MOUDI™ real-time impactor, the density of a particular size fraction of particle can be determined.



1nm SMPS 3938E57

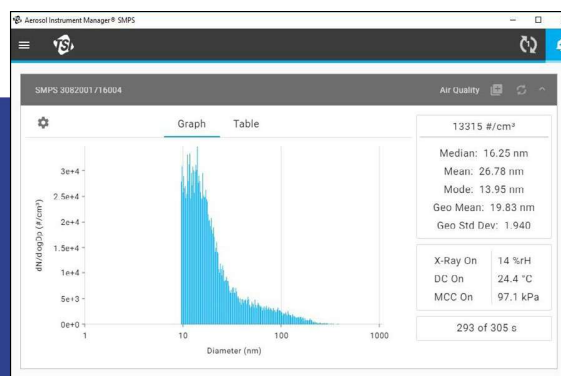


3086

3081A

3085A

3083



SMPS component systems give you the highest-resolution particle size data available with AIM 11 SMPS software.

## SMPS Accessories (available separately)

Specify	Description
3077/3077A	Aerosol Neutralizer
3088	Soft X-Ray Neutralizer