

# Solid Surface Zeta Potential

**SurPASS™ 3 Eco**



# The entry-level device for routine solid surface charge analysis

Knowing the surface charge of solids is crucial for understanding surface characteristics, optimizing surface modifications, or tuning material properties and production processes.

SurPASS™ 3 Eco is the entry-level instrument for routine analysis of macroscopic solid surfaces, enabling fully automated zeta potential measurements at real-life conditions. Users benefit from an established technology by the market leader in this field, Anton Paar – all integrated into an instrument that focuses on the most essential parameters for quick routine measurements in surface charge analysis.



## Analysis of real samples at the push of a button

SurPASS™ 3 Eco performs solid/liquid interface analysis directly on real samples under process or environmental conditions. The zeta potential is displayed in less than two minutes, based on the measurement of streaming potential and streaming current.

## Unsurpassed sensitivity

SurPASS™ 3 Eco delivers high-quality zeta potential values down to a few millivolts. Short intervals in data recording ensure enhanced measurement sensitivity. Simultaneous measurement of pH, conductivity, and temperature completes the surface zeta potential analysis.

## Utmost flexibility

Any sample geometry can be loaded into elaborate measuring cells. Ranging from powders and fibers to planar solids with different porosity, roughness, or swelling propensity: with SurPASS™ 3 Eco you get reliable and reproducible zeta potential measurements with no restrictions.

## Future-proof concept

SurPASS™ 3 Eco offers the possibility of an easy upgrade. If desired, a titration unit can be integrated on-site to enable automatic pH scans and determination of the isoelectric point with just one mouse-click. The upgrade furthermore offers the recording of liquid-on-solid surface adsorption kinetics for an even deeper understanding of surface properties.

## Essentials at a glance

- Zeta potential measurements in less than two minutes
- Easily exchangeable measuring cells for any sample geometry
- Real-time visualization of key parameters
- Upgradable to automatic pH scans and adsorption kinetics

