

SPS – Raman Spectroscopy

Sensor fusion combining water vapour sorption and Raman spectroscopy opens new and exciting perspectives for the analysis of solid materials.

Control of the Raman spectrometer via the SPS user software enables the automated recording of Raman spectra during a running sorption measurement.

The DVS-Raman spectroscopy combination is a powerful tool to monitor moisture induced phase transitions such as hydrate formation and crystallisation of amorphous materials.

Technical data Manufacturer, model Spectral range

Resolution Detector TEC set point Integration time Laser Laser power Working distance **Dimensions & weight Environmental conditions** Software

270 ... 2000 cm⁻¹ 7 cm⁻¹ 10 ± 0,2 °C 3 ms ... 60 s 785 nm, multimode up to 450 mW, adjustable by the software 50 mm (variable) width 16.5 cm, depth 16.2 cm, height 8.2 cm, weight 2.2 kg 0 °C to 40 °C, non condensing

Wasatch Photonics WP 785

- Synchronisation of the SPS with the Raman spectrometer
- User defined event triggered recording of Raman spectra (e.g. equilibrium conditions, time interval)
- Display of Raman spectra within the SPS Software
- SPS11-10 µ, SPSx-1µ-High-Load, SPSx-1µ-Advance







Sorption isotherm of citric acid measured at 25 °C and Raman spectra of the anhydrate and monohydrate form.

