



Multisample Dynamic Moisture Sorption SPS11-10 μ

Fully automated, multisample gravimetric sorption analyzer. Determination of sorption and desorption isotherms and sorption kinetics over a wide temperature and humidity range.

The SPS11-10 μ system is a robust and easy to operate DVS system. The gravimetric resolution of 10 μ g enables the analysis of medium and large samples with high accuracy. With the large load range of the balance, the system is perfectly suited for the analysis of bulky or heavy samples.



Technical data

Number of samples
Min sample weight
Max sample weight
Balance resolution

11 samples in dishes \varnothing 50 mm

<50 mg

220 g per sample (total max 500 g)

dual weight range:

10 μ g resolution up to 111 g

with ± 20 μ g repeatability RMS*,

100 μ g resolution from 111 g to 220 g

with ± 100 μ g repeatability RMS

Temperature range

+5 °C to +60 °C

Temperature accuracy

over time ± 0.1 K

Humidity range

0 % RH to 98 % RH**

Humidity accuracy

± 0.5 % RH (0 ... 98 % RH), at 10 ... 30 °C

Long term stability

better than 1 % RH per year

Water supply

removable tank, 700 ml

Gas supply

compressed air/N₂

2.5 bar to 10 bar

Dimensions & weight

dry, clean, oil-free (class 1, ISO 8573-1:2010)

width 488 mm, depth 630 mm, height 437 mm

(1024 mm with open lid), weight 62 kg***

Environmental cond.

temperature +15 °C to +25 °C, humidity max 75 % RH

Power supply

100-240 VAC, 50-60 Hz, consumption: 0.5 kW***

Calibration sensor

calibration with salt solutions

Internal controller

operating system Windows 10 (English)

Software

SPS Software (English) incl. calibration tool

21 CFR part 11 compliant software package (optional)

Data format

MS Excel, LIMS compliant data format

Optional hardware

camera, Raman, Permeability Kit, Large Objects Kit

* Root mean square.

** The full humidity range can only be achieved at a chamber temperature slightly above room temperature.

*** Dimension, weight and power consumption do not include keyboard, mouse and monitor.