



Multisample Dynamic Moisture Sorption SPS23-100n

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

The SPS23-100 is a highly sensitive system with a gravimetric resolution of 100 nanogram. It is designed for applications where only very small amounts of sample material are available such as pharmaceutical pre-formulation.



Technical data

Number of samples	23 samples in dishes Ø 18 mm
Min sample weight	<3 mg
Max sample weight	2000 mg per sample
Balance resolution	0.1 µg
	±1.5 µg repeatability RMS*
Temperature range	+5 °C to +40 °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/N ₂
	2.5 bar to 10 bar
	dry, clean, oil-free (class 1, ISO 8573-1:2010)
Dimensions & weight	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

* Root mean square. The specified values assume that the system is installed in an environment suitable for the operation of submicrobalances. The best achievable repeatability is about 0.5 µg RMS depending on the environment.

** 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.