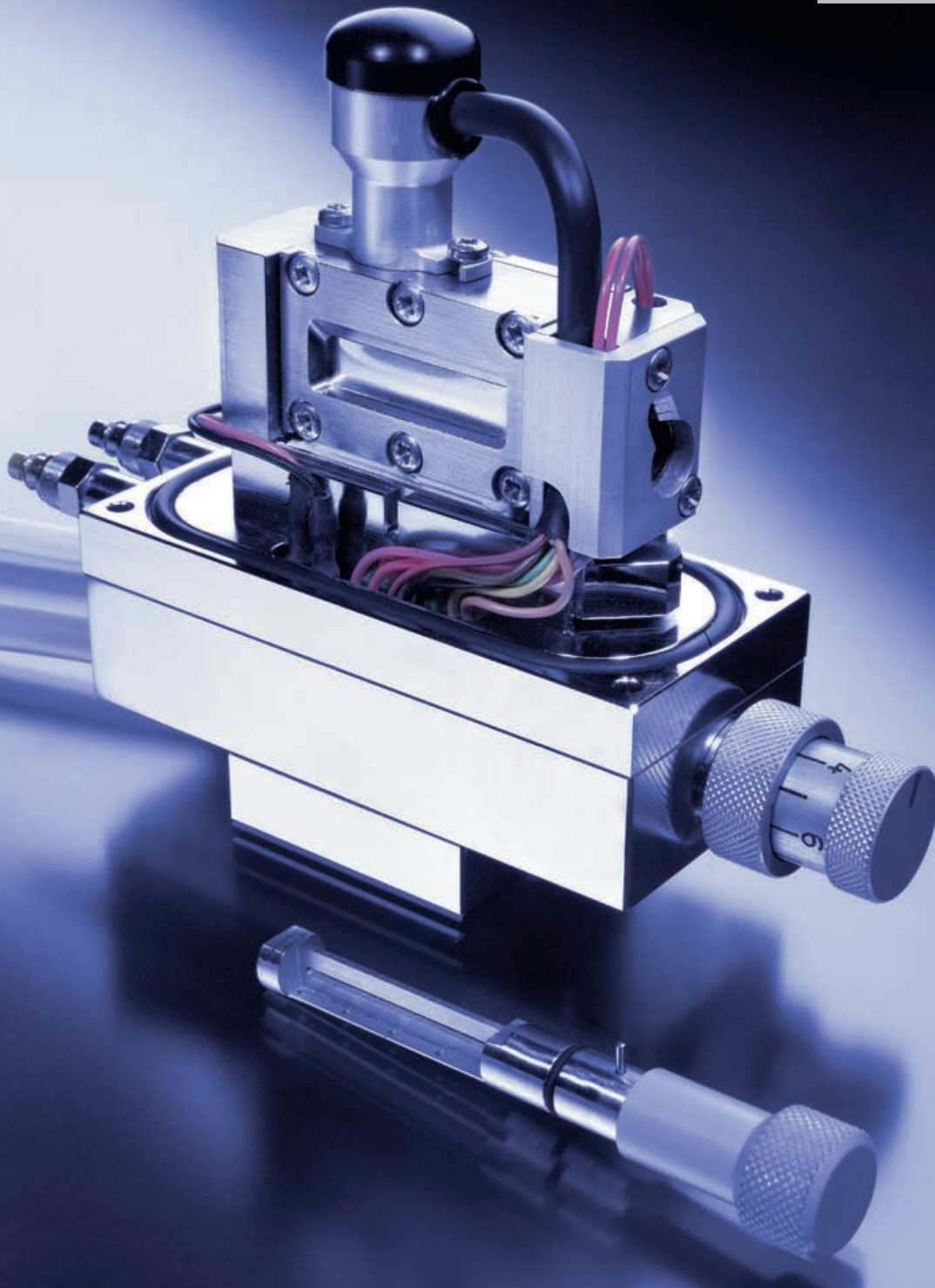




Anton Paar

::: Innovation in Materials Science



SAXSess Humidity Cell

The Humidity Cell is another unique analytical tool from Anton Paar for performing studies with the SAXSess small-angle X-ray scattering system at varying temperatures and relative humidities.

Small in size, great in performance!

A new answer to your analytical questions

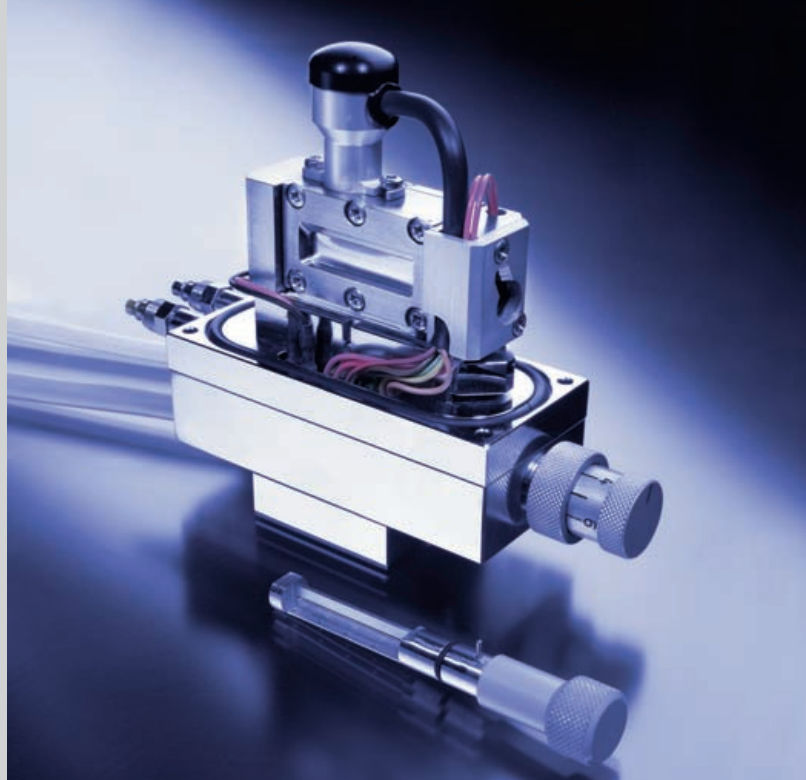
The Humidity Cell is designed to study the influence of temperature and relative humidity (RH) on materials with the SAXSess small-angle X-ray scattering system.

Simultaneous small- and wide-angle X-ray scattering (SAXS/WAXS) studies can be performed in the temperature range from 15°C to 60°C under relative humidities up to 95% RH or from 5°C to 120°C in dry atmosphere.

Precise control of the environment

The Humidity Cell is equipped with an internal humidity sensor and an internal Pt 100 temperature sensor to monitor the environmental conditions right at the sample position.

The temperature and relative humidity during an experiment are controlled by the TCU 50 temperature control unit and a computer-controlled RH generator, respectively.



Clever design

The Humidity Cell is easily retrofitted to the SAXSess and mounted instead of the standard sample holder unit. The gas inlet is heated above the sample temperature by a circulating-water bath to prevent condensation inside the cell.

For the Humidity Cell there are different sample holders available. They allow for measurements of powders, pastes, foils, films and fiber. A special filling equipment for powders makes the sample handling very easy.

Features and benefits

- ▶ A unique tool for SAXS/WAXS studies at non-ambient temperatures and/or relative humidity conditions
- ▶ Reliable monitoring of the sample temperature
- ▶ Internal sensor for monitoring the relative humidity at the sample position
- ▶ Holders for a wide variety of samples such as powders, pastes, foils, films, fiber
- ▶ Wide range of applications with pharmaceuticals, fibers and membranes
- ▶ Quick and easy installation

Technical specifications

Operating temperature	
In air, inert gas, vacuum	5 °C to 120 °C
At relative humidity (5% to 95%)	15 °C to 60 °C
Temperature measurement	Pt 100 acc. to DIN 43760
Temperature control	TCU 50 temperature control unit
Control accuracy	± 0.1 °C
Heating	Peltier heating

Dimensions/weight

Sample holder material	Stainless steel
Sample types	Powders, pastes, foils, films, fiber
Sample size	
Powders, pastes	Approx. 28 mm ³
Foil, films	21 x 7 mm

Anton Paar GmbH

A-8054 Graz, Anton-Paar-Str. 20
Tel: +43 (0)316 257-0, E-mail: info@anton-paar.com
Fax: +43 (0)316 257-257, Web: anton-paar.com

Instruments for:

Density & concentration measurement	Colloid science
Rheology and viscometry	X-ray structure analysis
Sample preparation	CO ₂ measurement
Microwave synthesis	High-precision temperature measurement



Specifications subject to change without notice.

Your distributor: