HORIBA
Scientific

SA-9600V3 Series

BET Multipoint Surface Area Analyzers

SA-9600V3

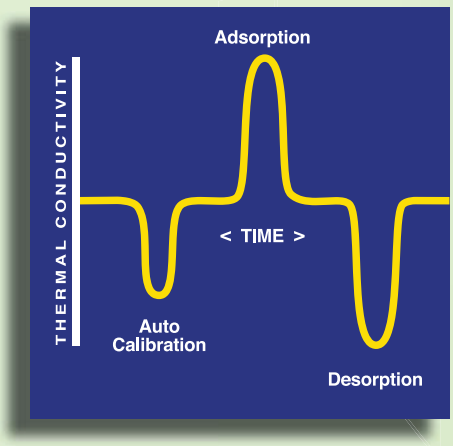
SPEED, SIMPLICITY, PRECISION AND ECONOMY FOR YOUR SURFACE AREA APPLICATIONS

Introducing HORIBA's next generation of the SA-9600 Series, which brings exceptional convenience and confidence to surface area analysis. Now your single-point and multi-point surface area measurements can be performed with push-button ease. In single-point mode, up to ten sample analyses can be performed per hour.

HORIBA's use of the flowing-gas method allows routine total surface area measurements to be made as quickly as every six minutes, depending on magnitude of surface area. The three-station SA-9603 analyzer measures three samples simultaneously. The multi-point performance is comparable to the slower and more expensive static volumetric systems.

Applications

The SA-9600 provides quick, user friendly specific surface area analysis for a wide variety of powders ranging from catalysts to active pharmaceutical ingredients (API's). Low surface area API's and excipients are particularly well suited for analysis by the SA-9600, which provides a quicker measurement time at a lower cost than competitive options.



To ensure repeatable, accurate measurements the HORIBA analyzer calibrates the detector and zeros the baseline before every analysis. Because it is fully automated, the SA-9600 series eliminates variables that are sometimes introduced by operator involvement, such as the measurement of nitrogen or movement of the dewer flasks. Considering its many advantages, the SA-9600 series analyzers are very modestly priced, delivering the lowest per-analysis cost available.

Push and Go!

Just touch a buttton and the SA-9600V3 analyzers automatically perform every measurement step. Detector baselines are zeroed, then a high precision valve injects 1cc of nitrogen (N_2) into the flow system to calibrate the analyzer. Next a liquid nitrogen bath is raised around the sample cells. From a stream of mixed gas flowing through the sample cell, N_2 is adsorbed on the powder's surface. Then the bath is lowered, and the amount of desorbed N_2 is measured and proportioned to the calibration signal to determine the sample's surface area. Finally, the surface area is divided by the sample's weight to provide the specific surface area in m^2/g. For multi-point analysis, this sequence is repeated for each of the gas mixture points. For single-point surface area analysis, the flowing gas is 30% nitrogen (user selectable.)

Runs as a stand alone...

The SA-9603, the three-station analyzer is a complete solution with an on-board computer, full alphanumeric keyboard, vacuum fluorescent display and integrated three-sample de-gas preparation station. Additional de-gas capacity is available via a dedicated SA-9660V3 three-sample prep station. The analyzer stores up to 100 analyses in memory and provides a parallel output to furnish ASCII files to printers or send serial output to LIMS.

...And Connects to a Remote PC.

Complete with newly designed software, the SA-9600V3 series analyzers can be operated remotely from any PC with Windows.

The SA-9600V3 analyzer comes with sample preparation stations (2 or 3 depending on the model). If additional preparation capacity is desired, the model SA-9660 prep station, which has three preparation stations, can be purchased separately.

SA-9600V3 Series Specifications:

	SA-9601	SA-9601MP	SA-9603	SA-9603MP
Single point surface area	Yes	Yes	Yes	Yes
Multi-point surface area	No	Yes	No	Yes
Analysis stations	1	1	3	3
Preparation stations	2	2	3	3
Range	0.10 to > 2000 square meters per gram			
Analysis time	Typically 6 minutes per sample	Typically 6 minutes per point	Typically 6 minutes per analysis (three simultaneous samples)	Typically 6 minutes per point (three simutaneous samples)
Repeatability	<1% relative standard deviation (RSD)			
Power Requirements	100, 120, 220 or 240 volts AC, 50/60 Hz Maximum peak power 200 Watts,			
Weight	34.5 pounds (14.5 kg.)	38 pounds (17.7 kg.)	38.5 pounds (15.9 kg.)	42 pounds (18.14 kg.)
Dimensions	20” H x 14” D x 14” D (50.8cm H x 35.6cm W x 35.6cm D)			

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