



## V-Sorb 2800P BET surface area and micropore analyzer

- \* Capable of determining surface area, mesopore and micropore size;
- \* The sample pretreatment stations has a pre-set time function, supports to work at night automatically, save time;
- \* 2 testing stations and 2 pretreatment/ degassing stations;
- \* Desirable tool for laboratory researching work;
- \* Low cost for after-sale service no matter in hardware supply or tech service.

### V-Sorb 2800P BET surface area and micropore analyzer introduction

V-Sorb 2800P BET surface area and micropore analyzer uses static volumetric adsorption principle, be designed with 2 analysis stations and 2 pretreatment stations. The pretreatment stations and analysis stations are separated, can work simultaneously and independently. All setting can be done through software interface, easy understanding operations can make all learners to fully master it within 1 days. This model mainly be used for research work like for universities and institutes, can be used for determine nanomaterials surface area, meso & micropore data.

### V-Sorb 2800P BET surface area and micropore analyzer specifications

1. Analysis Ability: volumetric adsorption/ desorption isotherms, BET (Brunauer-Emmett-Teller) surface area, Langmuir surface area, t-plot external surface area, BJH (Barrett-Joyner-Halenda) total pore volume and pore size distribution, t-plot, MP, HK (Horvath-Kawazoe), SF (Saito-Foley), DA (Dubinin-Astakhov), DR (Dubinin-Radushkevich) micropore etc.
2. Measuring Ranges: 0.01 m<sup>2</sup>/g (by N<sub>2</sub>)/ 0.0005m<sup>2</sup>/g (by Kr) to no known upper limit (specific surface area); 0.35 - 500nm (pore size)
3. Accuracy: repeatability errors within 1%
4. Vacuum System: V-Sorb unique monolithic manifolds and solenoid valve control system, greatly reduce the dead volume; enhance pore size distribution analysis resolution
5. Coolant Level Prober: V-Sorb original coolant level control system with temperature probe, ensure the coolant level unchanged when compares with sample cells
6. Sample Pretreatment: the pretreatment be controlled by software, has a start time preset function can realize unattended operation at night, much improve working efficiency
7. Sample Stations: 2 analyzing and 2 pretreatment/degassing stations work simultaneously and independently
8. Pressure Transducer: branded pressure transducers supports low P/Po point determination, 1000 and 1Torr dual transducers
9. Partial Pressure: P/Po controllable accuracy range is 5x10<sup>-6</sup> - 0.998
10. Ultimate Vacuum: 4x10<sup>-2</sup>Pa (3x10<sup>-4</sup>Torr)
11. Vacuum Pump: built-in vacuum pump be controlled by software can auto control pump start/stop
12. Adsorbate Gas: high purity N<sub>2</sub>, Ar, Kr, CO, CO<sub>2</sub> etc. non-corrosive gases area optional
13. Data Reduction: Windows-based software, perfect versatility, produced full featured and multi-model reports

### A: Vacuum System

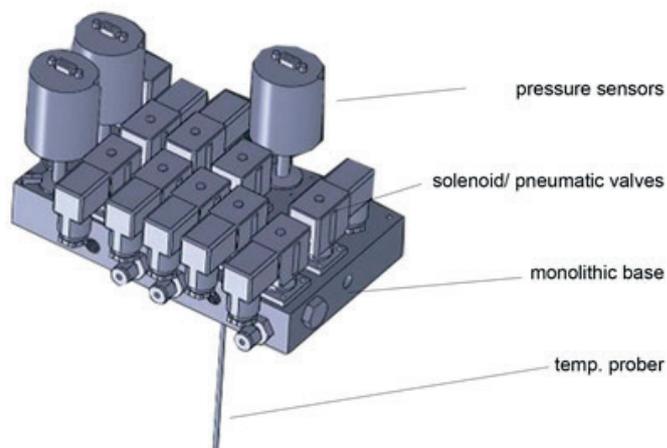
1. Unique centralized manifolds system, decrease connecting points apparently, reduce leak rate, improve ultimate vacuum.
2. Modularity design can configure as customer requests, also be benefit for future upgrading and maintenance.

### B: Control System

1. Branded programmable solenoid valve system, strong anti-interference ability, convenient for installation and uninstallation.
2. Separated analysis and pretreatment manifolds can prevent impurities to contaminate analysis manifolds during pretreatment.

### C. Measures for Improving Accuracy

1. Brand silicon thin film capacitive pressure transducer, accuracy can reach 0.1% of real reading, better than 0.1% of F.S.
2. 1Torr & 1000Torr pressure transducers, sectional measurement in pressure range can reduce errors in low vacuum.
3. Unique centralized monolithic manifolds system, decrease connecting points and reduce leak rate apparently.
4. Original stepping coolant level control system, ensure the coolant level unchanged when compares with sample cells in the whole analysis process, completely eliminate the error be caused by dead volume.



centralized manifolds system,  
can minimize connection points and reduce leakage.

