

BET SPECIFIC SURFACE AREA ANALYZERS

- Suitable for rubber additives, catalysts, battery materials, pharmaceuticals, ceramics, adsorbents, etc.
- PFC electronic control system, enabling precise control of gas inlet and outlet to boost analysis efficiency
- Self-locking valve technology eliminates valve overheating and gas leakage
- Dynamic temperature-difference calibration eliminates interference from liquid nitrogen volatilization
- Equipped with independent gas paths, pressure sensors and vacuum pumps
- Users can customize the number of isotherm/BET analysis points, dosage volume, analysis duration, and cutoff points



8-position analysis station



BET-S810-U

SPECIFICATION

Part No.	BET-S410-U	BET-S610-U	BET-S810-U
Analysis method	vacuum static volumetric adsorption & desorption isotherms BET/Langmuir specific surface area BJH pore volume, pore area, total pore volume analysis t-plot specific surface area isothermal adsorption test		
Range	specific surface area: $\geq 0.001\text{m}^2/\text{g}$ mesopore analysis: 2~50nm macropore analysis: 50~500nm		
Accuracy	specific surface area $> 1\text{m}^2/\text{g}$: $\pm 1\%$ samples with specific surface area $\leq 1\text{m}^2/\text{g}$: $\pm 1.5\%$ pore size repeatability deviation $< 0.02\text{nm}$		
Sample analysis station	4 positions	6 positions	8 positions
P ₀ test station	independent saturated vapor pressure test station for real-time measurement		
AI intelligent degassing station	maximum temperature: 752°F		
Adsorbate gas	N ₂ , Kr, Ar, CO ₂ , etc.		
Vacuum system	ultimate vacuum: $4 \times 10^{-2}\text{Pa}$		
Data acquisition	high-precision 24-bit ADC system with automatic data storage		
Work environment	41~95°F, 35%~80%RH		
Power supply	110V, 50Hz, 1000W		
Dimensions (L×W×H)	main unit	17.72×34.65×30.71"	
	degassing station	14.96×11.02×11.81"	
Net weight	main unit	121.25lb	
	degassing station	22.05lb	

STANDARD DELIVERY

Main unit	1 pc
Degassing station	1 pc
Vacuum pump	2 pcs
Computer	1 pc
Software	1 pc
Liquid nitrogen tank (empty)	1 pc
Dewar flask	1 pc
CRMs for specific surface area of Al ₂ O ₃	1 pc
Metal funnel	5 pcs
Flat-bottomed sample tube	30 pcs
Packing column	10 pcs

OPTIONAL ACCESSORY

Electronic balance	8312-220A
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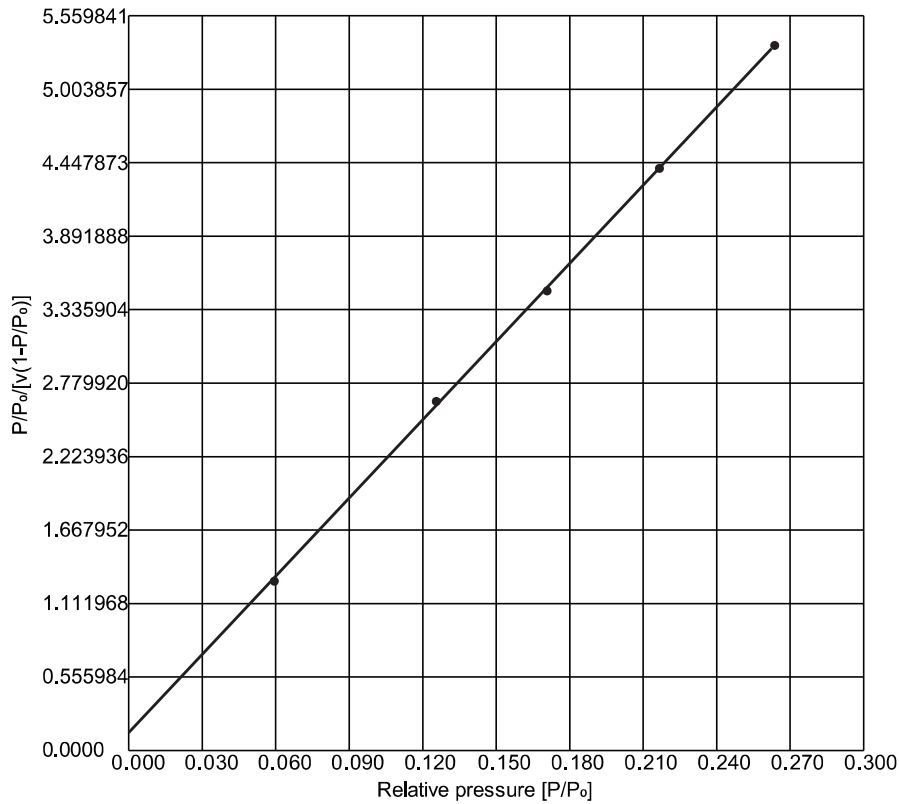


degassing station (included)

stability test for 8-position analysis station

Analysis station	1	2	3	Mean	SD	RSD
1#	5.4314	5.4239	5.3727	5.4093	0.0319	0.59%
2#	5.4084	5.3773	5.34	5.3752	0.0342	0.64%
3#	5.4122	5.3865	5.3883	5.3957	0.0143	0.27%
4#	5.4032	5.3906	5.4092	5.4010	0.0095	0.18%
5#	5.4751	5.4163	5.4193	5.3942	0.0007	0.01%
6#	5.3926	5.3411	5.3527	5.3937	0.0080	0.15%
7#	5.3617	5.3535	5.3497	5.3933	0.0168	0.31%
8#	5.3186	5.3664	5.3688	5.3928	0.0255	0.47%

application example



P/P ₀	P/P ₀ /[v(1-P/P ₀)]	BET SSA	slope	intercept	R ²
0.059798	1.290259	2.594328	3.469297	4.372692	5.295086
0.127894	0.2206				
0.173251	19.677280				
0.218517	0.089372				
0.262872	0.999847				

BET plot for Lithium-Ion battery electrode materials