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Name of the equipment: <u>BET Surface Area Analyzer:</u>

Detailed specifications:

BET surface area analyzer should be fully automated high -speed, surface area and pore size analyzer, vacuum volumetric, gas sorption system, high throughput, cost effective system tests one sample while degassing one sample and also should be built-in powerful microprocessor and it should make single and multipoint surface area analysis.

- Sample Volume Range: 0.1 135 cm³
- **Resolution:** 0.0001 g/ cm^3

Accuracy and Reproducibility:

- Large Sample Cell (135 cm³⁾ Accuracy - better than +/- 0.02% Repeatability - better than +/-0.01%
- Medium Sample Cell (up to 50 cm³) Accuracy - better than +/- 0.03% Repeatability - better than +/ 0.015%
- Small Sample Cell (up to10 cm³) Accuracy - better than +/- 0.03% Repeatability - better than +/- 0.015%

Analysis Time: Less than 1 minute per run.

Purge Modes:

1. Continuous flow with user selectable time; or

2. Pulse with user selectable number of pressurization/depressurization cycles; or

3. Vacuum for user selectable time with automatic valve configuration (vacuum pump supplied separately).

Flow/Evacuation Rates: User-selectable with precision needle valve.

Pressure Range: 1-20 psig

Properties should be able to measure:

- Internal surface area range: 0.1 m²/gm 1500 m²/gm and extendable up to 2500 m²/gm.
- Mean Pore Diameter ~20 nm
- Primary Particle Diameter 2-5 nm
- Pore distribution
- Pore volume

Quote all essential and optional accessories, software and computer.

Quote the all prices for the 1, 2, 3 & 4 analysis stations. Also quote the all essential accessories.

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