

SPECIFICATIONS

3Flex



3Flex Physisorption Only

3Flex Chemisorption

Analysis

Analysis Range	1.3 x 10 ⁻⁹ to 1.0 P/P ₀	1 x 10 ⁻⁶ to 900 torr
Available Micropore Ports	up to 3	up to 3, one port dual purpose chemisorption and physisorption
Dosing and Evacuation Control	Proprietary Servo	Proprietary Servo
Roughing Pump	4 stage diaphragm	4 stage diaphragm
Krypton Analysis	Standard 1 port, optional up to 3 ports	Standard 2 or 3 ports

Analysis Gas Per Sample

Ability to use up to 3 gases concurrently, one probe gas on each port

Minimum Measurable Surface Area

Standard	0.01 m ² /g	0.01 m ² /g
Krypton	0.0005 m ² /g	0.0005 m ² /g

Instrument Control and Features

Temperature Control	45 °C, ±0.05 °C with 3 strategically placed RTDs	45 °C, ±0.05 °C with 3 strategically placed RTDs
Adsorptive Gas Inlets	6	12 standard; optional up to 16
Vapor Sorption Option	Standard ports 1 and 2, optional heated	Standard ports 1 and 2, optional heated
Furnace (chemisorption model only)	N/A	Programmable- 0.1–50°C/minute 50°C/min to 600°C 20°C/min from 600 to 800°C 10°C/min from 800 to 1100°C
Mass Flow Controller (chemisorption model only)	N/A	Standard, flow up to 200 cm ³ /m, ±1% of set point
TCD w/cold trap (chemisorption model only)	N/A	Optional two levels of available performance

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Standard External Dedicated Port	N/A	Heated port for connection of external detectors including an available Cirrus™ Quadrapole Mass Spec
Degas	3 in situ, 6 additional with SmartVac Prep	3 in situ, 6 additional with SmartVac Prep
A/D data acquisition	29 bit (effective 25)	29 bit (effective 25)
Pressure Transducer System	up to 12	up to 12
Transducer Accuracy	1000 torr 0.12% reading 10 torr 0.12% reading 0.1 torr 0.15% reading	1000 torr 0.12% reading 10 torr 0.12% reading 0.1 torr 0.15% reading

Cryogen

Cryogen Dewar	3.2 L, greater than 70 hrs virtually unlimited with refill during analysis	3.2 L, greater than 70 hrs virtually unlimited with refill during analysis
Cryogen Free Space Control	Isothermal Jacket	Isothermal Jacket

Reports

Advanced Modeling	GAB, Sips, Toth, dissociative Langmuir, Redlich-Peterson
Instrument Operation Dashboard	Dashboard permits real-time monitoring of critical parameters

Minimized Bench Space Footprint

Height	112 cm	112 cm
Width	57.2 cm	57.2 cm
Depth	61 cm	61 cm
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Depth	61 cm	61 cm