

ASAP 2050 Xtended Pressure Specifications

Pressure Measurement

Range:

0 to 10 Atmospheres

Resolution:

Analysis transducer: 0.00015 psi

Accuracy (Analysis System Only):

0.1% BFSL (Best Fit Straight Line)
Includes nonlinearity, hysteresis, and nonrepeatability. Transducer manufacturer's specifications.

Gases

Argon, carbon dioxide, nitrogen, hydrogen, oxygen* and other suitable gasses

*requires oxygen-compatible vacuum pump for analysis system

Vacuum System

Vacuum Pump:

Mechanical, two-stage, ultimate vacuum 5 x 10⁻³ mmHg; two pumps (one analysis and one degas)

Manifold Temperature Transducer

Type: Platinum resistance device (RTD)

Accuracy: ± 0.02 °C (by keyboard entry)

Stability: ± 0.01 °C per month

Degas System

Temperature Range: Ambient to 450 °C

Selection: 1 °C increments

Accuracy: Deviation less than ± 10 °C of set point at thermocouple

Backfill Gas: User-selectable, typically helium or nitrogen

System Capacity

Sample Preparation:

Two degas ports, each with independently controlled heating mantle, using servo-controlled restricted evacuation

Analysis:

One sample port; One saturation pressure tube port

Total Operation Capacity:

Up to two complete analysis units can be controlled by one computer.

Cryogen System

Special Features:

Patented Isothermal Jackets effectively maintain cryogen level constant on sample tube and Po tube during analysis while evaporation of cryogen occurs.

Capacity:

3-Liter Dewar, provides at least 50 hours of unattended analysis

Analysis Time:

Unlimited. Cryogen Dewars may be refilled without affecting the accuracy of results.

Physical

Height: 99 cm (39 in.)

Width: 85 cm (33.5 in.)

Depth: 61 cm (24 in.)

Weight: 115 kg (250 lbs)

Sample Size

Straight-wall stainless steel sample tube:

0.50 inch outside diameter

0.44 inch inside diameter

Electrical

Voltage: 100/115/230 VAC

Frequency: 50/60 Hz

Power: 800 VA, exclusive of vacuum pumps which are powered separately

Environment

Temperature: 10 to 35 °C operating
-10 to 55 °C non-operating

Humidity: Up to 90% relative (non-condensing) for instrument. 20% - 80% for computer system

Computer Minimum Requirements

Processor: Pentium 333 MHz or superior

Operating System: Windows 2000 or XP Professional

Memory: 128 megabytes of RAM

Hard Disk Space: 1 gigabyte

Monitor: SVGA 800 x 600

Media Drive: One CD ROM drive