

Calibration made easy

Fully Automated Portable Calibration System For Vacuum Gauges

VMS²
High Accuracy

617.391.0755
One Westinghouse Plaza
Boston, MA 02136
www.vacuummetrology.com

VACUUM
metrology systems



High Accuracy and Precision in a Small Package

- Up to 3 NIST traceable transfer Standards with basic accuracy of $\pm 0.05\%$ reading
- Fully Automatic pressure control from 1×10^{-5} to $1 \times 10^{+3}$ Torr
- Control Resolution up to 0.01% of the Set Point
- User or Automatic assignment of calibration points
- RS232, Analog or Ethernet/Modbus inputs for UUT data collection
- Unlimited Calibration recipes and UUT data
- Built in Technical Controls for compliance with CFR Title 21, Part 11
- Secure Log of every operational step and data for clear audit trail
- Secure Database and Calibration Report creator
- Fully compliant with ISO 3567: Vacuum Gauges – Calibration by direct comparison with a reference gauge
- Simultaneous calibration of 3 gauges
- Fast and Repeatable calibrations
- Intuitive User Interface
- Cleanroom compatible, Easy to wheel around
- Rugged, Portable, Small Footprint, 2'(61cm)x2'(61 cm)



Calibration made easy

HIGH ACCURACY TRANSFER STANDARDS

3 NIST traceable Baratron® 690A gauges with basic accuracy of $\pm 0.05\%$ of the reading

NUMBER OF TEST PORTS

3

BASE PRESSURE

Less than 5×10^{-7} Torr (7×10^{-5} Pa)

PRESSURE CONTROL RANGE

1×10^{-5} to 1000 Torr (1.3×10^{-3} to 1.3×10^5 Pa)

PRESSURE CONTROL RESOLUTION

Up to 0.01% of set point

PROCESS GAS

Nitrogen or Dry Air

DRY PUMPING SYSTEM

Scroll + Turbomolecular pumps

FULLY ENCLOSED CABINET

Eliminates temperature variations and removes the uncertainty contributions caused by the temperature drift.

CLEANROOM COMPATIBILITY

Fully Compatible

ISO COMPATIBILITY

Fully compliant with ISO 3567: Vacuum Gauges – Calibration by direct comparison with a reference gauge

3 OPERATING MODES AND SERVICE MODE

Automatic mode

- Automatic selection of set points based on the entered number of set points per decade
- Automatic processing from lowest to highest pressure set point

Semi-Automatic mode

- Manual entry of set points prior to the test
- Automatic processing from lowest to highest pressure set point

Manual mode

- Manual set point entry (one at a time) with automatic pressure and process control
- Each consecutive set point can be set higher or lower than the previous one

Service Mode

- Manual control of all valves and controllers
- Beneficial for step by step system calibration and troubleshooting

UNITS SELECTION

Torr, Pascal, mBar

UUT DATA ACQUISITION

RS232, Analog or Ethernet/Modbus

DATA AVERAGING

10 to 99 points

THERMAL TRANSPIRATION

ON/OFF for standards and UUTs

TEST PARAMETERS RECIPES

Unlimited

DATA & SYSTEM SECURITY

Built in Technical Controls for compliance with CFR Title 21, Part 11

Secure process recipes database

Secure, searchable Calibration database

Log of each operational step for clear audit trail

User Configurable access Level

SAFETY FEATURES

FAIL SAFE Isolation valves keep Transfer Standards within specified pressure ranges AT ALL TIMES

