

# Calibration made easy

## Fully Automated Portable Calibration System For Vacuum Gauges

**VMS<sup>2</sup>**  
Standard Accuracy

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**VACUUM**  
metrology systems



### Accuracy and Precision in a small package

- Up to 3 NIST traceable transfer Standards with basic accuracy of  $\pm 0.12\%$  reading
- Fully Automatic pressure control from  $1 \times 10^{-4}$  to  $1 \times 10^{+3}$  Torr
- Control Resolution up to 0.1% 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

## TRANSFER STANDARDS

3 NIST traceable transfer standards with basic accuracy of  $\pm 0.12\%$  of the reading

## NUMBER OF TEST PORTS

3

## BASE PRESSURE

Less than  $5 \times 10^{-7}$  Torr ( $7 \times 10^{-5}$  Pa)

## PRESSURE CONTROL RANGE

$1 \times 10^{-4}$  to 1000 Torr  
( $1.3 \times 10^{-2}$  to  $1.3 \times 10^{+5}$  Pa)

## PRESSURE CONTROL RESOLUTION

Up to 0.1% 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

