**MD-490S - The Real Sniffer**

The MD-490S is a leader among portable tracer gas leak detectors. With a response time less than 0.5 seconds, sensitivity to $10^{-8}$ direct reading atm-cc/sec, and the ability to zero-out background, this is the most aggressive portable leak detector in the industry, with advanced features designed specifically for industrial use. The MD-490S is fully integrateable with our SmartChargeIII Evacuation and Backfill Station.

### BENEFITS
- Fully integrated with our SmartChargeIII Evacuation and Backfill Station
- Response Time less than 0.5 seconds
- Ability to zero-out background
- The most aggressive portable leak detector in the industry
- Available in dual-gas Helium/Hydrogen configuration
- Portable
- Password Protection prevents unauthorized access

### APPLICATIONS

**Air Conditioning & Refrigeration Systems**
- Coils & Hoses
- Evaporators & Condensers
- Compressors

**Automotive Components**
- Evaporators & Condensers
- Radiators
- Air conditioning components
- Fuel Tanks
- Fuel Rails injection systems
- Hoses
- Heat exchangers
- Heater cores
- Pressure transducers
- Headlights
- Wheels

**Appliances**
- Fire Extinguishers
- Gas Meters
- Heat Pumps

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**Optional Accessories:**
- Vibra-leak™ Probe
- RS-232 Interface
- PLC Interface (AC)
- PLC Interface (DC)

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**Optional Accessories:**
- Analog Interface
- Remote Box Assembly
- Maintenance Kit
- Spanish Prompts

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**Vacuum Instruments Corp**

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Product Specifications

Performance (Sniffer)
Sensitivity: Smallest detectable helium leak rate 5x10^{-5} Atm-cc/second helium (atmospheric sniffer mode). Helium leak tested to 1.0 × 10^{-6} atm-cc/sec@600 psig.

Response Time: Approximately 0.5 seconds.

Leak Rate Range: 10^{-3}–10^{-5} Atm-cc/second direct reading of helium leak rate (compensated for atmospheric sampling).

Startup Time: Less than 3 minutes; one-button automatic operation.

Electrical
Console: Microprocessor-based electronics incorporating 40-character alphanumeric prompting display; fully automatic operation including startup, shutdown, leak rate ranging, automatic zero, and diagnostics including operating and runtime parameters; contains 40 segment leak rate indicator and operator function buttons

System Details
Mass Spectrometer: Miniaturized 90° deflection, fixed magnet design, all stainless steel construction, MW-40 flange for high vacuum connection, utilizes two non-burnout coated filaments.

Vacuum Pumps: Dry (oil-free) built-in diaphragm fore pump and 9,000-liter/min air-cooled molecular drag pump.

Inlet System: Interstage design incorporating integral mass separator high flow atmospheric inlet, standard sniffer probe hose length 10-feet; other lengths available.

Calibrated Leak: 150cc high pressure cylinder with low volume stainless steel leak element traceable to N.I.S.T. with calibration certificate supplied; easily removable for recalibration.

Pressure Measurement: Probe blocked sensor (10^{-3} Torr); turbopump speed characteristics for high vacuum (10^{-6} Torr).

Power: 115/220 Volts AC, 60/50 Hz, 6/3 Amps; CE Compliant

Weight: 70 pounds (31.8 kilograms)

Dimensions: 13-9/16"(344mm) W x 15 9/16"(395mm) H x 24-5/16"(618mm) D

Software
Linx Data Capture

FEATURES
• Recovery efficiencies up to 98%
• Fastest response time in the industry (less than 0.5 seconds)
• Helium background suppression
• Maintenance-free, dry pump
• Less than 3 minutes total start-up time
• Fully interactive system diagnostics with multilingual displays
• Front panel key lock-out
• Complete with standard probe and built-in calibrated gas leak
• Optional Remote Display and exclusive Vibrating Probe
• Five year warranty on major components
• Automatic startup and shutdown
• Auto-ranging
• Probe Blocked feature with alarm to ensure proper system performance
• Made in the USA