

# MD-490S

## Optional Accessories:

- Vibra-leak™ Probe
- RS-232 Interface
- PLC Interface (AC)
- PLC Interface (DC)



## Optional Accessories:

- Analog Interface
- Remote Box Assembly
- Maintenance Kit
- Spanish Prompts

## 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.

## 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



Integrated solution for leak detection



Leak ID Station with Single Table

## 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



# Product Specifications

## Performance (Sniffer)

**Sensitivity:** Smallest detectable helium leak rate  $5 \times 10^{-5}$  Atm-cc/second helium (atmospheric sniffer mode). Helium leak tested to  $1.0 \times 10^{-6}$  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

Built-in Calibrated Leak is easy to view



## 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

Multilingual Alphanumeric Prompting Display



Optional Vibra-Leak TM Probe

