

# MS-50GT-UHS Ultra High Sense



## What Sets the MS-50 GT UHS Apart

Description	VIC	Others
Leak Standard	$5 \times 10^{-12}$	$1 \times 10^{-9}$
Time to $10^{-12}$ Leak	< 30 min.	4+ hrs.
Auto Test Start	Yes	No
Stability @ $10^{-12}$	High	Low
Leak Standard(*)	0.2%	3.0%
Background Filter	91%+	None
Buy American	Yes	No
Small Business	Yes	No

(\*) Temperature Coefficient



**Support for MIL-STD-883K  
Method 1014 Class K**

**VIC complies with:  
FAR 52.225-2 (Buy American) &  
FAR 52.212-3 (Small Business)**

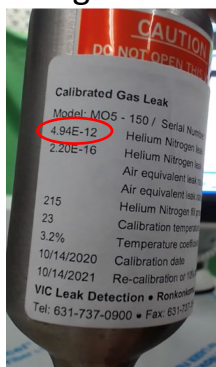
## MS-50GT-UFT Ultra High Sense

The MS-50GT-UHS is the fastest, most accurate, and most repeatable Helium leak tester capable of detecting leaks at  $5 \times 10^{-12}$  in the industry. The MS-50GT-UHS is able to achieve a stable  $5 \times 10^{-12}$  testing range in less than 30 minutes. The unit features Auto Test Start technology - where the machine can cycle start as soon as the Test Cup lid is closed. The system also comes equipped with a Patent pending background filter for higher accuracy and repeatability.

## Comparison of Detecting a $10^{-12}$ Leak Size vs $10^{-9}$



The high accuracy and repeatability starts with a true  $10^{-12}$  calibrated leak – not the typical  $10^{-9}$  calibrated leak. The difference is significant; it is equivalent to needing to detect a leak the size of a sugar cube but only being capable of detecting a leak the size of a Soccer Ball.



## VIC MS-50GT-UHS Works with these VIC Components



Bombing Stations



Bell Jar w/ Base Plate



Test Cups w/ Auto Test Start

# Product Specifications

## Characteristics:

Sensitivity:  $5.0 \times 10^{-12}$  (atm-cc/sec)

Leak Ranging: Auto/Manual

Startup Time: Less than 30 minutes

Response Time: <2secs direct

Resolution: 14 at mass 4

Mass Spectrometer Tube: 180° deflection; dual-magnetic sector

Auto-tuning: Yes

Auto-calibration: External – Auto

Auto-zeroing: Yes; several zeroing functions, modes for background suppression

Reject set-point: Yes

Built-in calibrated leak: External,  $10^{-10}$  Range, 3.2% Temperature Coefficient. NIST traceable and ISO 17025-2017

Temperature compensated: Yes

Filaments: 2 Thoria Coated Iridium

Testable Masses: 4

Background Compensation: Automatic

Maximum Operating Pressure: 100 mTorr

Display/Interface: 10 (25.4) LCD flat panel display, capacitive touch-screen / Graphical User Interface (GUI)

Units: cc/second, mbar l/second, Pa\*M3/second

Printer Port: No      RS-232C: Yes

Software: 50 programmable test recipes; Data Link optional

## System Details:

Vacuum Mode: Direct

Dry Roughing Pump: 16 cfm Dual Stage

Foreline Pump Assy: 33 Liter/sec Turbo + 1CFM Diaphragm Pump

High Vacuum Turbo Pump: 53 Liter/sec

Cryogenic Background Filter: Does not require liquid Nitrogen

Dimensions (W x H x D): 26" x 31" x 48" (66 x 78 x 122)

Test Cup, UFT Option ATS(Ø x D): 4.5 x 1.0 (11.4 x 2.5)

Test Port Connection: 1.125 (inches)

Weight: 550 (215.45) lbs. (kg)

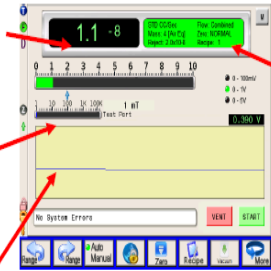
Power: 115/50-60/30; 230-240/50-60/15; 100/50-60/30 V/Hz/A



Leak Rate Displayed Numerically in STD CC Sec, Mbar l/Sec or Pa M3/Sec

Leak Rate Displayed Graphically Corresponding to Numeric Exponent.

Test Port Pressure Displayed Graphically in mTorr or Bar



Settings Displayed for Leak Rate Unit, Helium Mass Weight, Reject Point, Flow Mode, Zero Status and Recipe number setting

## FEATURES

- The only production leak detector with pedestal table-top and interactive LCD touch-screen display and GUI
- Auto Test Start mode allowing for programmable automatic test cycle operation
- Dual pump system – dedicated Dry Foreline and Dry Roughing Pumps
- Built-in diagnostics for trouble-free maintenance
- Simple one-button power up has systems ready to test in less than 30-minutes
- Fully automatic startup, tuning and calibration
- Starts testing at Atmospheric Pressure
- Three Flow modes provide flexibility and maximum productivity for application-specific leak testing
- Resolution of 14 at mass 4 is twice the industry average
- Password protection

**VIC complies with:**

**FAR 52.225-2 (Buy American) & FAR 52.212-3 (Small Business)**

