



Advanced Test Equipment Rentals
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Mass Spectrometer VS Series Leak Detector

WIDE RANGE, HIGH PERFORMANCE SYSTEM



Inspiring Excellence

VARIAN, INC.

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NOTICE: This document contains references to Varian. Please note that Varian, Inc. is now part of Agilent Technologies. For more information, go to www.agilent.com/chem.



The Varian Advantage

Maximizing Productivity and Uptime

Global Applications Support Expertise When & Where You Need It

- Native language specialists available locally worldwide
- Application specific consulting
- More than ten thousand installed systems delivering application solutions to customers in a broad range of industries



High Performance Instruments

VS Series Leak Detectors

- Easy to Use
- Powerful
- Versatile
- Dependable
- Truly Portable



Industry Leading Service & Support

Get The Most From Your Investment

- Most extensive network of service engineers available locally to meet your needs
- Exchange inventory for replacement components
- On-site or factory repair
- Full range of standard and customized support plans



VARIAN

Features and Benefits



Easy-to-Use – Two Button Operation

VS Series Leak Detectors combine the simplicity of two-button operation with advanced expert system intelligence.

- Fully automated start-up and calibration maximizes productivity
- Intuitive menu structure is easy to navigate
- Programmable test sequences improves testing efficiency
- Color touch screen provides excellent clarity, even at wide angles



Powerful – Broad Range of Test Methods

The state-of-the-art spectrometer and vacuum system design provides powerful capability, enabling a broad range of test methods for specific applications.

- High test port pressure allows for detection of large leaks
- 12-range MDL (sensitivity) meets the most stringent leak test requirements
- High helium pumping speed ensures fast system response and clean-up times
- New high efficiency ion source and beam optics optimize sensitivity and mass separation



Versatile – Multiple System Configurations

A wide range of options allows for broad configuration flexibility, meeting all application requirements and test environments.

- Primary pump and system mounting options may be selected to best suit your needs
- Multiple language and units capability permits easy implementation worldwide
- Compact lightweight design enables easy transport from one application to another



Dependable – Robust Design

Robust design innovations allow the VS series to conform to the most rigorous industrial standards and operate dependably in the most challenging environments.

- Fast clean-up time enhances system up-time
- Robust Faraday cup technology delivers proven reliability with low cost of ownership
- Conforms to CE, UL and CSA standards, assuring global acceptance



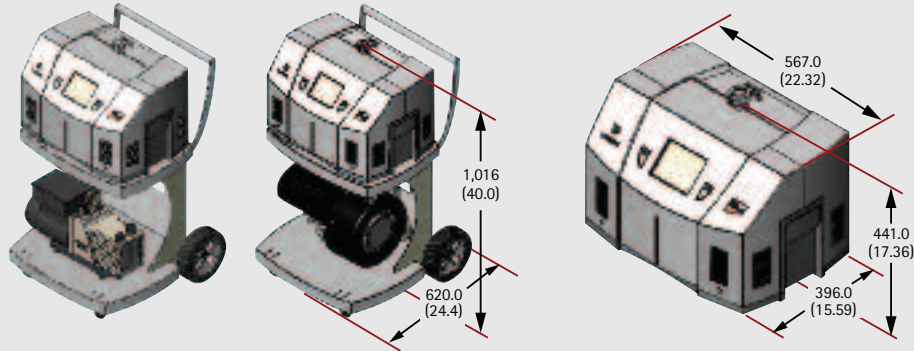
Truly Portable – Wireless Remote Control/Display

Hand-held remote performs essential functions up to 100 meters (328 feet) indoors, facilitating access to all leak sites.

- Eliminates cumbersome cables while extending range
- Allows testing of large systems by a single operator
- Leak detector can be located outside cleanroom to prevent contamination
- Multiple channels for use of one remote with up to ten leak detectors

VS Series Mass Spectrometer Leak Detector

OUTLINE DRAWING



UL/CSA, CE Approved

Dimensions: millimeters (inches)

TECHNICAL SPECIFICATIONS

Model Number	PR02/PD03	MR15 & MD30
Configuration Options	Bench Top	Bench Mount or Mobile
Primary Pump Type	Rotary vane pump DS-42 2 m ³ /hr (34 l/m)	Dry scroll pump DS-302 14 m ³ /hr (232 l/m)
	Dry pump combo – 2 m ³ /hr (34 l/m)	TS-620 30 m ³ /hr (500 l/m)
Minimum Detectable Leak at 1000 ppm ambient He	5 x 10 ⁻¹² atm cc/sec : 5 x 10 ⁻¹² mbar l/s : 5 x 10 ⁻¹³ Pa m ³ /sec helium	
Maximum Test Port Pressure	13 mbar, 10 Torr, 1330 Pa	
Helium Pumping Speed @ Test Port (Fine Test)	1.8 l/s	
Calibration Routine	Automated or manual (internal or external)	
Background Suppression	Push button initiated auto zero, and auto zero < zero function	
User Interface	High clarity, color display, TFT touch screen	
Selectable Languages	English, French, German, Japanese, Korean, Mandarin, Spanish	
Automated Cycling	Programmable rough time, test time, reject set points	
Response Time	< 0.5 seconds	
Set Points	Standard, 5 set points, N/O or N/C; 3 leak rate, 1 pressure, 1 audio	
Communications Interface	RS-232 isolated interface @ 9600 baud (DB-9S)	
Discrete I/O	Optically isolated, 5-24 VDC outputs and inputs (DB-25S)	
Wireless Remote Control (optional)	2.4 GHz ISM band, 100m (328 ft) range, 4 AA batteries or 5 VDC supply	

ORDERING INFORMATION

Model Number	Description	120 Volt	220 Volt	Weight
VS PR02	Portable Leak Detector, DS42 Rotary Vane Pump	VSPR021	VSPR022	59 kg (130 lbs)
VS PD03	Portable Leak Detector, Dry Pump Combo	VSPD031	VSPD032	59 kg (130 lbs)
VS MR15	Mobile Leak Detector, DS302 Rotary Vane Pump	VSMR151	VSMR152	81 kg (178 lbs)
VS MD30	Mobile Leak Detector, TS620 Dry Scroll Pump	VSMD301	VSMD302	92 kg (202 lbs)
VS BR15	Bench Mount Leak Detector, DS302 Rotary Vane Pump	VSBR151	VSBR152	51 kg (112 lbs)
VS BD30	Bench Mount Leak Detector, TS620 Dry Scroll Pump	VSBD301	VSBD302	62 kg (137 lbs)
Options/Accessories		Factory Installed		Field Installed
Oil Mist Eliminator, PR02		VSFACME		VSFLDME
Wireless Remote, Base Unit		VSFACWB		VSFLDWB
Hand-held Remote Control				VSLDWRC
Discrete I/O		VSFACIO		VSFLDIO
Leak Test Data Wizard Software				VSLTDW
1 1/8 in. Compression Test Port				VSFLDCP
Sniffer, NW25				K9565306

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Varian, Inc.

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