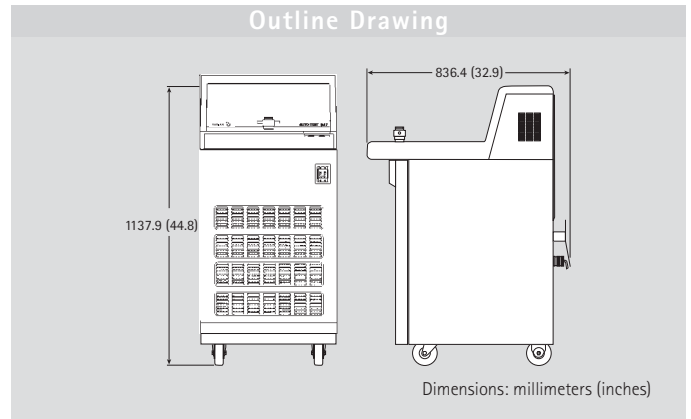


947/948/960 Cabinets



The 947, 948 and 960 cabinet model leak detectors are especially designed for high production testing. By using two primary pumps and high conductance valve manifolds, these systems deliver very fast cycle times. The valves have proven reliable for over 1 million cycles. Using two primary pumps also allows for gross leak testing. The 948 uses liquid nitrogen to improve the pumping of water vapor and other condensables in the roughing cycle, further reducing cycle times. The 960 utilizes liquid nitrogen to improve cycle times and sensitivity. All of these units feature one button automatic calibration and

zeroing. Parallel I/O and RS232 remote interfaces are available for remote control operation and data collection.

- Cabinet configuration with stainless work surface facilitates high volume testing
- Fully automated tuning, calibration and zeroing reduces likelihood of operator error
- High transfer pressure, high conductance valve manifold and two primary pumps result in very short cycle times
- Available in wet and dry versions
- Integrated internal calibration standard (NIST-traceable)

Technical Specifications

		947		948		960	
Sensitivity Ranges, <i>atm cc/sec</i>	Standard sensitivity unit	10 ¹ to 10 ⁻⁸		10 ¹ to 10 ⁻⁸		10 ¹ to 10 ⁻¹⁰	
	High sensitivity unit	10 ¹ to 10 ⁻⁹		10 ¹ to 10 ⁻⁹			
Minimum detectable leak at 1000 ppm ambient helium, <i>atm cc/sec helium</i>	Standard sensitivity unit	2 x 10 ⁻⁹		2 x 10 ⁻⁹		2 x 10 ⁻¹¹	
	High sensitivity unit	2 x 10 ⁻¹⁰		2 x 10 ⁻¹⁰			
Maximum test port pressure, <i>Torr</i>		760		760		0.5	
High vacuum pump		V70D Turbo/drag pump					
Primary pump type		Fore Pump	Rough Pump	Fore Pump	Rough Pump	Fore Pump	Rough Pump
	Rotary vane pump	DS-202	DS-302	DS-202	DS-302	DS-202	DS-302
	Dry scroll pump	TS-320	TS-320 or TS-620	TS-320	TS-320	TS-320	TS-320 or TS-620
Inlet flange		1 1/8" Compression					
Calibration routine		Automatic					
Background suppression		Automatic and Auto Zero < Zero					
Automatic cycle sequencing		Standard, Adjustable rough and test times					
Leak indication		50 segment bar graph w/ exponent display					
Leak units displayed		atm cc/second					
Ranging		Automatic/Manual (selectable)					
Set points		One (1)					
Communications interface (plug or connector), optional		Serial RS-232 Interface @9600 baud (DB-25S)					
Remote IO (plug)		Parallel Interface, (DB-25S & DC-375S) w/ opto-isolated input (5-24V)					
Analog Leak Rate Output (plug)		0-10V, Linear or Logarithmic 2V/decade (plug)					
Audio Alarm		Yes					
Recommended Ambient Operating Temperature		10 to 38 °C (50 to 100 °F)					
Power Requirements		115VAC, 20A, 60/50Hz or 230 VAC, 10A 60/50 Hz					
Weight (Base Unit)		232 kgs (510 lbs)					
Remote Control		Optional, Remote control Interface (DE-09S)					
Conformance Standards		Meets applicable CE, UL, CSA requirements					

Ordering Information

Configuration	Part Number			
	Base	xxx = Rough Pump	x = Sensitivity	xxx = Voltage
947 with Rotary Vane Pumps DS-202 Fore pump	L94720xxxxxxx	• 300 = DS-302	• T = Standard Sensitivity • M = High Sensitivity	• 120 • 220
947 with Dry Scroll Pumps TS-320 Fore pump	D94735xxxxxxx	• 350 = TS-320 • 550 = TS-620		
948 with Rotary Vane Pumps DS-202 Fore pump	L94820xxxxxxx	• 300 = DS-302	• T = Standard Sensitivity	
960 with Rotary Vane Pumps DS-202 Fore pump	L96020xxxxxxx	• 300 = DS-302		
960 with Dry Scroll Pumps TS-320 Fore pump	D96035xxxxxxx	• 350 = TS-320 • 550 = TS-620		

Description	Shipping Weight kg (lbs)	Part Number
Accessories and Options		
Atmospheric gross leak option (factory installed)		L6927301
Serial and parallel I/O (factory installed)		L9596301
Remote control/display unit with 25' cord, (serial and parallel I/O required)	0.5 (1)	L9558302
Sniffer probe, 1 1/8" compression fitting, 10' hose	1.8 (4)	K9565301
Sniffer probe, 1 1/8" compression fitting, 25' hose	1.8 (4)	K9565302
Calibrated leak, external, 1 1/8" compression, 10 ⁻⁷ range (NIST-traceable)	1.8 (4)	F8473301
Calibrated leak, external, 1 1/8" compression, 10 ⁻⁸ range (NIST-traceable)	1.8 (4)	F8473302
Tuning leak	0.9 (7)	K1608301
Throttle valve	1.8 (4)	626603345
Spectrometer tube cleaning kit	1.4 (3)	670029096
Universal test fixture, 1 1/8" compression port, NW25	4.5 (10)	L6241301
Replacement Parts		
O-ring kit for 947, 948, and 960	0.5 (1)	L5669801
Ion source, thoriated-iridium	0.1 (0.2)	82850302
Collector Assembly	0.5 (1)	K9740301
Manual	1.4 (3)	699909947

