Data Sheet

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Agilent Multi-Gas CrossLab Sniffer Leak Detector

The Agilent Multi-Gas CrossLab Sniffer Leak Detector is designed to detect leaks of noncorrosive gases, including mixtures of gases.

Mini-sized portable multi-gas sniffer, high sensitivity, and low cost

The Multi-Gas CrossLab Sniffer leak detector is the latest mini-sized portable sniffer from Agilent's Vacuum Products Division. This sniffer leak detector provides an industrial level of sensitivity and responsiveness for the various gas types, such as helium, hydrogen, argon and nitrogen.

Features

– High sensitivity TCD sensor
– Palm-sized instrument
– Lightweight ergonomic design with kickstand
– Excellent response and zeroing time
– Easy-read OLED display
– Audible leak rate alarm/beep at 49.9dB
– Firmware upgradable via USB for newly added features and updates
– Battery and USB powered

The multi-gas sniffer leak detector is perfect for verifying and troubleshooting gas delivery systems thus avoiding costly leaks and safety concerns. It is also a perfect manufacturing tool for leak checking stations for offline leak location and repair.

The multi-gas leak detector provides a low-cost solution for those sniffing applications that don't require a quantifiable leak rate verification.
The instrument's high sensitivity TCD sensor is capable of distinguishing gases with higher thermal conductivity than air such as hydrogen and helium and gases with lower thermal conductivity than air like argon and xenon. Therefore, a greater difference in thermal conductivities results in greater sensitivity and ability to detect very small leaks.

Detection Mode of Operation

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Table 1. Thermal conductivity of common gases at 0°C, 1 atm.

Gas	Thermal Conductivity (mW/M K)
Hydrogen	168.2
Helium	142.2
Neon	46.5
Methane	30.2
Oxygen	26.7
Air*	24.1
Nitrogen	24.0
Ethane	18.0
Ethylene	16.4
Argon	16.3
Carbon Dioxide	14.5
Krypton	8.7
Xenon	5.2

** Reference gas is not detectable.*

Filled bar. Gas leak for gases with higher thermal conductivity than air.

Empty bar. Gas leak for gases with lower thermal conductivity than air.

Table 2. Calculated minimum detectable leak rate for selected gases and the style of bar used as a gas level indicator.

Gas	Minimum Detectable Leak Rate (mbar l/sec)	Bar Type used as a Gas Level Indicator
Hydrogen	4.2E-5	Filled bar
Helium	5.1E-5	Filled bar
Methane	2.3E-4	Filled bar
Nitrogen	6.8E-3	Empty bar
Argon	5.1E-4	Empty bar
Carbon Dioxide	5.1E-4	Empty bar

Technical Specifications

Sensitivity	Helium 5.1E-5 mbar l/s Hydrogen 4.3E-5 mbar l/s
Response Time	<2 seconds
Zeroing Time	<1.5 seconds
Audible Leak Rate Alarm	49.9 dB
OLED Display	128x64 monochrome w/16 grayscales
Power	Three AA batteries (alkaline) or USB power
Operating Temperature Range	0 to 45°C (noncondensing)
Storage Temperature	-15 to 50°C
Dimensions	201mm x 88mm x 48mm
Weight	420g

Ordering Information

Description	Part Number
Multi-Gas CrossLab Sniffer Leak Detector	G8613A
Replacement Leak Detector Cartridge only	G6694A
Leak Detector Probe Mesh Filter	G6694-60005

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