

PRODUCT TECHNICAL BRIEF

Agilent PHD-4 Portable Helium Sniffer Leak Detector

Agilent PHD-4 Portable Helium Sniffer Leak Detector - LeakLab solutions for leak testing, vacuum systems and test equipment.

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Technical Data

PARAMETER	PUBLISHED VALUE / INFORMATION
Lowest detectable helium concentration	2 ppm
Minimum detectable leak	5×10^{-6} mbar·l/s; 5×10^{-7} Pa·m ³ /s
Response time	<2 s
Recovery time	<10 s from 50 ppm to 0 ppm
Start-up time	Approximately 3 min, including self-test
Reading drift	Maximum 10 ppm per 10 min
Indication and interfaces	Graphical display, variable-frequency audible signal, RS-232 and analog output
Power	12 V DC from the battery pack, vehicle battery or transformer; supplied transformer input 110-240 V AC, 50-60 Hz
Battery operation	Up to 4 h on a full charge
Operating conditions	+5 to +35 °C; relative humidity up to 90%, non-condensing
Weight	2.6 kg including battery
Dimensions	Approximately 170 × 136 × 290 mm

Technical and Project Information

Portable battery-powered helium sniffer with SIPD selective detection, sensitivity down to 2 ppm helium and a minimum detectable leak rate of 5×10^{-7} Pa·m³/s. The 2.6 kg instrument starts in about three minutes and operates for up to four hours on a fully charged battery.

The PHD-4 is a compact sniffer instrument for locating helium escaping from pressurized components and systems. Agilent SIPD (Selective Ion Pump Detection) technology provides helium selectivity without a mass spectrometer. Automatic start-up, self-test, tuning and background suppression support field and production use.

The PHD-4 is used in the positive-pressure sniffer method: the test object is filled or pressurized with a helium-containing tracer gas, and the probe is moved along potential leak locations. The achievable system-level test sensitivity depends on the tracer concentration, pressure, probe technique, ventilation and background helium.

Agilent lists basic package 9694600 and complete package 9694640. Package contents and availability vary by ordering code. Confirm whether the required quotation includes the probe set, spare battery, travel case, charger, carrying strap, I/O connector, filters and current English documentation.

Pressurization and tracer-gas work must follow the applicable pressure-equipment rules and the manufacturer's instructions. Final acceptance limits and test procedure should be defined for the actual component and operating conditions.

- Leak Detectors Leak-Test Systems Portable Helium Leak Detectors Pressure-Change Leak-Test Instruments Helium Mass-Spectrometer Leak Detectors
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- Pressure-Change Leak-Test Instruments
- Helium Mass-Spectrometer Leak Detectors
- Helium Reference Leaks
- Scanning Electron Microscopes
- Leak-Detector Accessories

WORLDWIDE PROJECT CONTACT

Send the test object or system, operating conditions, target sensitivity or pressure range, applicable standard, destination country, quantity and schedule. LeakLab will review the project scope.

mail@leaklab.org

Regarding: Agilent PHD-4 Portable Helium Sniffer Leak Detector

Specifications, standards, verification scope, availability and commercial terms must be confirmed for the exact configuration and destination jurisdiction before order or project acceptance.