

# Ultrasonic Leak Detector

Portable / Handheld Model : UL - 102



Protects **Personnel, Plant  
& Assets**



**SUITABLE FOR PREDICTIVE MAINTENANCE, ENERGY SAVINGS, LEAK DETECTION, INTEGRITY TESTING, STEAM TRAP ASSESSMENT, CRITICAL VALVE DIAGNOSTICS, ELECTRICAL ARCING CORONA DISCHARGE, COMPRESSED GAS LEAK DETECTION IN HIGH BACKGROUND NOISE**

**TECHNOLOGY** UL-102 is compact, handheld device and it comes with a flexible wave guide for inaccessible areas. Unique acoustic design of precision probe maximizes sensitivity for contact applications, such as bearing and valve analysis. If air / gases escape through leaks, ultrasonic noises are generated. By means of the dual frequency band UL-102 detector, leakages can be detected in the ultrasonic range in noisy environments.

UL- 102 works by detecting and converting the high frequency sound associated with turbulence, friction and arcing in industrial and commercial systems down to the audible range, where they can be heard in the headset and viewed on the meter. Translation is done by HETRODYNING - comparing the incoming signal with one generated signal by the meter. UL-102 is most sensitive to sounds around 40KHz, that's twice the frequency of the best human hearing. Because UL-102 is focused on a specific band of sound, most normal operational sound like wind, noise, voices, traffic, etc will NOT be detected

The regular inspection of leaks in compressed air, gases, vacuum systems, critical valve diagnostics using the UL-102 leads to increased operational reliability and guarantees a higher degree of availability of machinery. UL-102 is designed for use in area of moderate to high background noise such as plant, institutional environment etc. Other models are also available for high and very high background noise. For ex. VPX-WR is used for very high background noise such as textile industries.

## SPECIAL FEATURES

- Handy & light weight
- Dual frequency band for critical industrial applications in noisy environments
- Graphic LCD display
- Tuned for frequency range from 20 KHz to 100 KHz for better pickup of leak detection
- Inbuilt heterodyne sensor
- Headphone, carry case with optional spectrum analysis software

## APPLICATIONS

- Locates leaks in compressed air, gases and vacuum systems
- Finds the source of bearing and gear wear
- Locates arcing in an electrical system
- Detects refrigeration and air conditioning system leaks
- Locates leaks in breaks systems, tubes, tire and radiators, senses cracks in moving rubber V-belts
- Check condition of engine seals, door seals

**HNL Systems Pvt. Ltd.**

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\* Images for representational purpose only

## SPECIFICATIONS

Type	Portable / handheld
Detectable gases / parameters	Frequency
Electronics / processor	Micro-controller
Power supply	Rechargeable battery with charger
Display	Graphic LCD
Technology	Ultrasonic Frequency Detector
Principle	Heterodyne
Frequency	30 KHz, 40 KHz
Accuracy	± 2 KHz
Response time	Instantaneous
Operating temperature	0 - 55 °C
Sampling / input	Diffusion
Housing / case	High impact ABS plastic
Included accessories	Carry case, Headphone
Optional accessories	Spectrum analysis software
Probe	Airborne for external sound, touch probe for internal sound
Sensitivity	-65 Db/ubar at 40 KHz
Band Width	± 2 KHz
Headset	Dynamic 32 ohm
Weight	175 grams
Dimensions	(H x L x D)166 x 88 x 32 mm

Note : Specifications and Features will vary with application. There may be changes overtime due to continuous development process.  
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