



Leak Detectors

# Industrial Refrigerant Leak Detector H25-IR PRO

Patent: #6,590,690



Optional  
Smart Probe



Quickly  
Pinpoints  
Leaks



With Exclusive Numeric  
Leak Rate Display

## Features & Benefits:

- Advanced Leak Quantification (ALQ™) technology eliminates the need for periodic adjustments to a calibrated reference leak source.
- Utilizes infrared technology to quickly and accurately pinpoint leaks as well as to extend sensor life and minimize false alarms.
- Automatic calculation of gas concentration regardless of flow rate
- Responds to leaks in less than 1 second and detects leaks as small as 0.03 oz/yr (0.9 g/yr)
- Assortment of probes available for specific applications
- Comprehensive diagnostics keep track of system parameters

## Quick and Accurate Detection of Most Refrigerants

Bacharach's H25-IR PRO is a next generation industrial-grade refrigerant leak detector and gas analyzer capable of detecting over 40 of the most commonly used refrigerants and halogen gas compounds as well as R600a and R290. It can be used to locate and then quantify gas leaks, as well as log and totalize a group of leaks in a system. The H25-IR PRO adds new ground breaking capabilities, including proprietary leak quantification technology, that ensure accurate and reliable operation.

The H25-IR PRO raises the industry benchmark for high-production gas detection and analysis. In addition, a new menu system simplifies setup and operation while preserving the preferred digital numeric leak rate display. For users who are required to validate instruments against a known reference leak source, an optional leak reference tool, the LS-25 Series Leak Standard, is also available.

## H25-IR PRO Technical Specifications

<b>Gases Measured:</b>	All common CFC and HCFC refrigerants: R11 • R12 • R21 • R22 • R23 • R32 • R113 • R114 • R123 R124 • R125 • R134a • R227 • R236fa • R245fa • R401A • R402A • R402B • R404A • R407A R407C • R408A • R409A • R410A • R422A • R422D • R424A • R426A • R427A • R438A • R500 R502 • R503 • R507 • R508B • HFP • H1211 • H1234YF • H1301 • H2402 • N1230 • FA188 • FC72
<b>Optional Gases Detected:</b>	R600a • R290 • SF <sub>6</sub> * (Optionals require an alternate NDIR bench installation in the H25-IR PRO)
<b>Detection Method / Sensor:</b>	Non-Dispersive Infrared (NDIR)
<b>Measurement Units:</b>	oz/yr • g/yr • mL/s • PaM <sup>3</sup> /s • ppm
<b>Measurement Range:</b>	0.01 to 5.00 oz/yr • 0.85 to 142 g/yr • 0 to 1,000 ppm • 0.08 x 10 <sup>-5</sup> to 100 x 10 <sup>-5</sup> PaM <sup>3</sup> /s 0.08 x 10 <sup>-5</sup> to 100 x 10 <sup>-5</sup> mL/s
<b>Warm-Up Time:</b>	60 seconds to begin use
<b>Measurement Adjustment:</b>	Possible with Bacharach's optional external leak source unit of a known gas type and leak rate
<b>Operating Modes:</b>	<b>Search:</b> Detects presence and location of gas leaks • <b>Measure:</b> Calculates and displays leak rate
<b>Response Time:</b>	Less than 1 second, typical (dependent on probe-hose length)
<b>Sensitivity:</b>	0.03 oz/yr (0.9 g/yr) for all gases
<b>Resolution:</b>	0.1 leak units
<b>PPM Accuracy:</b>	±10% of reading (or ±1% if recalibrated using a known concentration of refrigerant gas)
<b>Temperature Drift:</b>	±0.3% of reading per °C
<b>Relays:</b>	Four SPDT relays rated 2 A at 250 VAC (inductive) 5 A at 250 VAC (resistive) Programmable to energize under 11 different operating conditions
<b>Audio Speaker:</b>	Audible indication of leak level
<b>Operating Temperature:</b>	32° to 122° F (0° to 50° C)
<b>Storage Temperature:</b>	-4° to 122° F (-20° to 50° C)
<b>Ambient Humidity:</b>	5 to 90% RH, non-condensing
<b>AC Power:</b>	100 to 240 VAC, 50/60 Hz
<b>Dimensions:</b>	4.00 in x 10.75 in x 15.50 in (101.6 mm x 273.1 mm x 393.7 mm)
<b>Weight:</b>	18 lbs. (8.2 kg)
<b>Warranty:</b>	2-year full warranty on instrument
<b>Approvals:</b>	CE Mark • EN 50270:2006 • EN 55011:2009/A1:2010 • EN 61010-1 / IEC 61010-1 • UL 61010-1:2001 / CSA 61010-1

\*The H25-IR PRO is not designed or certified for intrinsic safety and may not be suitable for use in certain environments.

### H25-IR PRO Ordering Information

<b>3016-1311</b>	H25-IR PRO • CFC/HCFC type sensor • 6 ft. Smart Probe • US power cord
<b>3016-1321</b>	H25-IR PRO • CFC/HCFC type sensor • 12 ft. Smart Probe • US power cord
<b>3016-1211</b>	H25-IR PRO • CFC/HCFC type sensor • 6 ft. LED Button Probe • US power cord
<b>3016-1221</b>	H25-IR PRO • CFC/HCFC type sensor • 12 ft. LED Button Probe • US power cord
<b>3016-1111</b>	H25-IR PRO • CFC/HCFC type sensor • 6 ft. Std. Probe • US power cord
<b>3016-1121</b>	H25-IR PRO • CFC/HCFC type sensor • 12 ft. Std. Probe • US power cord
<b>3016-2311</b>	H25-IR PRO • R600a type sensor • 6 ft. Smart Probe • US power cord
<b>3016-3321</b>	H25-IR PRO • R290 type sensor • 12 ft. Smart Probe • US power cord
<b>3016-1322</b>	H25-IR PRO • CFC/HCFC type sensor • 12 ft. Smart Probe • "G" type power cord (India, Malaysia)
<b>3016-1323</b>	H25-IR PRO • CFC/HCFC type sensor • 12 ft. Smart Probe • "I" type power cord (China)
<b>3016-3123</b>	H25-IR PRO • R290 type sensor • 12 ft. Std. Probe • "I" type power cord (China)
<b>3016-3223</b>	H25-IR PRO • R290 type sensor • 12 ft. LED Button Probe • "I" type power cord (China)

For other available sensor, probe & power cord configurations, contact your distributor.

### H25-IR PRO Probe Options

#### Smart Probe

Features an LCD display to show the current leak rate as well as an LED feedback indicator to signal the leak rate frequency or a defined threshold. Most of the instrument's primary functions, setups and features can be accessed via the probe's keypad.



#### LED+Button Probe

Features a button that can zero the unit or switch between the instrument's search and measure modes. The indicator LED provides visual feedback of the leak rate frequency or a defined threshold.

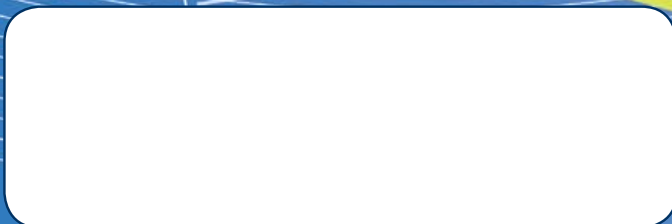


#### Standard Probe

Features flexible hose which enables basic pinpoint leak detection but does not provide any visual feedback or allow any user input via the probe.



### Distributed By:



### LS-25 Leak Standard

The LS-25 Series Leak Standard provides an NIST-traceable reference leak source for instrument functional testing or adjustment. The unit is factory calibrated and shipped fully charged with the selected refrigerant, sufficient to provide years of service. Annual re-calibration is suggested.



**BACHARACH**  
The Measurable Difference

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