



# HLD6000 CO<sub>2</sub><sup>TM</sup> Leak Detector

## GREATLY REDUCE FALSE ALARMS AND MINIMIZE RESPONSE TIME

The INFICON HLD6000 CO<sub>2</sub> Leak Detector is designed to detect CO<sub>2</sub> leaks in industrial environments fast, reliably, accurately and with minimum false alarms.

For proper leak detection, good background compensation is essential. Normal air includes about 300 to 400 ppm of CO<sub>2</sub>. The background concentration levels of CO<sub>2</sub> can change by up to 20,000 ppm when someone in the vicinity breathes normally. This creates a variable background concentration in leak detection.

INFICON uses a unique DUAL-Inlet technology in combination with a long-life infrared absorption sensing cell. Only this DUAL-Inlet technology compares variable background concentrations and reduces false alarms to a minimum. For more information, refer to the HLD6000 brochure.

The HLD6000 CO<sub>2</sub> Leak Detector is easily integrated into local networks through a variety of interfaces.

To maximize user uptime, the HLD6000 CO<sub>2</sub> Leak Detector includes a wear-free infrared sensor. This sensor results in low service and maintenance costs for the user.

### FEATURES AT A GLANCE

- Patented DUAL-Inlet technology reduces false alarms to a minimum
- Greater sensitivity by optimized infrared sensor
- Excellent response time: Less than one second
- Slim and ergonomically designed sniffer probe with status and LED lights
- Intuitive touchscreen with leak rate trend graph
- USB interface for storing measurement data and accessing software updates
- Detects leaks down to 1 g/a / 0.03 oz./yr.
- Can be operated in eight languages
- Optional I/O module and optional fieldbus modules facilitate integration into local networks
- Optimized external test leaks for CO<sub>2</sub> calibration



The HLD6000 CO<sub>2</sub> sniffer probe is ergonomically designed for easy handling and operation.

### CO<sub>2</sub> LEAK DETECTION APPLICATIONS:



- Automobile air conditioners
- Vending machines
- Heat pumps
- Hand fire extinguisher
- Cooling cabinets
- Absorption chiller

## TECHNICAL DATA

<b>Detectable refrigerants:</b> with sniffer probe for single gas detection with universal Smart sniffer probe	R600a/R290, R744 (CO <sub>2</sub> ) Halogen-based refrigerants
<b>Minimum detectable leakage rate:</b> with sniffer probe for single gas detection with universal Smart sniffer probe	1.0 g/a / 0.03 oz./yr. 0.5 g/a / 0.014 oz./yr.
Response time	<1 s
Leakage rate units	g/a, mbar l/s, oz./yr., lb./yr., Pa m <sup>3</sup> /s
Warm-up time	<30 s
Digital inputs/outputs	10 inputs, eight outputs (for use with I/O1000 module)
Serial interface	RS232 (for use with I/O1000 module) or field bus systems (for use with Profibus module, PROFINET IO module etc.)
Dimensions (diameter; height)	266 mm, 365 mm / 10.25 in., 14.4 in.
Weight	4.5 kg / 10 lb.
Allowed operating temperature	5 – 50°C / 40 – 120°F
Gas flow	320 sccm
Warranty	Three years

## ORDERING INFORMATION

**Base units:** The base units contain a sniffer line (4,8 m / 15.5 ft) and a standard sniffer tip (100 mm / 3.9 in.).

HLD6000 with R744 (CO <sub>2</sub> ) sniffer probe and adapter for R744 (CO <sub>2</sub> ) calibration *	510-025
HLD6000 with R600a/R290 sniffer probe*	510-028
HLD6000 with Smart sniffer probe and COOL-Check test leak	510-027

### Sniffer probes to exchange with sniffer line (4.8 m / 15.5 ft.)

R744 (CO <sub>2</sub> ) sniffer probes	511-045
Smart sniffer probes	511-047
R600a/ R290 sniffer probes	511-048

### Options, accessories:

I/O1000 module (input/output module)	560-310
Profibus module	560-315
PROFINET IO module	560-316
Device Net module	516-317
Ethernet/IP module	516-318

Additional fieldbus systems upon request

### Data cable (HLD6000-I/O1000)

2 m cable length	560-332
5 m cable length	560-335
10 m cable length	560-340
Sniffer tip (100 mm / 3.9 in.)	511-021
Sniffer tip (400 mm / 15 in.)	511-024
Sniffer tip (400 mm / 15 in.) prebent to half circle	511-022

\* without COOL-Check

### Extension for sniffer tip:

400 mm / 15.7 in	511-020
500 mm / 19.7 in, 45° offset	511-029
Water protection tip	511-025
Extension for probe cable, 4.8 m / 15.5 ft.	511-040
Adapter for R744 (CO <sub>2</sub> ) calibration Included in HLD6000 base unit with R744 (CO <sub>2</sub> ) sniffer probe	511-042
External test leak R134a, (2-5 g/a)	122 20
External test leak R600a, (2-5 g/a)	122 21
External test leak R290, (7-8 g/a)	122 31
External test leak R744 (CO <sub>2</sub> ), (2-3.5 g/a)	122 32
External test leak R1234yf, (2-5 g/a)	122 35
External test leak R32, (2-8 g/a)	122 36S

### Consumables:

Set of tip filter holders (20 pcs.)	511-027
Set of filter cartridges (20 pcs.)	511-018
Replacement COOL-Check reference leak (only for HLD6000 with universal Smart probe) limited shelf life, purchase only when needed.	511-010

Learn more about the HLD6000 CO<sub>2</sub> Leak Detector on our website.  
For more information, please visit [www.inficon.com](http://www.inficon.com)

