



HLD6000 CO₂ Leak Detector

Precise leak testing for food packaging.

Food manufacturers around the world rely on protective gas atmospheres to preserve product quality and shelf life. To ensure that this protective gas doesn't escape - and that product safety remains intact - packages must be tested for leaks. So why not use the CO₂ already present in the packaging for leak detection? The HLD6000 CO₂ leak detector makes this possible: precise, efficient, and without the need for additional test gas. A clean, reliable solution for the food industry.

Efficient Leak Detection with CO₂

Strict leak-tightness requirements and short cycle times demand fast and accurate testing. The HLD6000 CO₂ enables reliable, non-destructive leak detection - without introducing additional test gas into the packaging.

Leaks detected by the Contura S-Series from INFICON are precisely located by the HLD6000 CO₂, regardless of packaging shape, contents, or material. Alternatively, the device can also be used as a stand-alone solution. Thanks to its patented dual-channel inlet system and durable infrared

absorption sensor, the HLD6000 CO₂ compensates for fluctuating background concentrations and ensures accurate measurement results.

ADVANTAGES AT A GLANCE

- ✓ Detects leaks smaller than 1 µm
- ✓ Non-destructive testing
- ✓ Patented dual-channel inlet system for reliable measurements
- ✓ Optimized infrared sensor for increased sensitivity
- ✓ Fast response time under one second - no waiting
- ✓ Ergonomic sniffer probe with status and illumination LEDs
- ✓ Intuitive touchscreen with leak rate trend display
- ✓ USB interface for data storage and software updates
- ✓ User interface available in eight languages
- ✓ External test leaks for CO₂ calibration

TYPICAL APPLICATIONS OF CO₂ LEAK DETECTION

- Modified atmosphere packaging (MAP) with a CO₂ concentration
- Coffee packaging

HLD6000 CO₂ LEAK DETECTOR

SPECIFICATIONS

| | |
|-----------------------------------|---|
| Detectable protective gas | CO ₂ or CO ₂ mixtures |
| Smallest detectable hole diameter | <1 µm |
| Response time | < 1 s |
| Leak rate units | mbar · l/s, g/a, oz/yr, lb/yr, Pa m ³ /s |
| Time to operational readiness | < 30 s |
| Digital inputs/outputs | 10 inputs, 8 outputs (when used with I/O1000 module) |
| Serial interface | RS232 (when used with I/O1000 module) or fieldbus systems (when used with Profibus module, PROFINET IO module etc.) |
| Dimensions (diameter, height) | 266 mm, 365 mm |
| Weight | 4.5 kg |
| Permissible operating temperature | 5 - 50 °C |
| Gas flow | 320 sccm |
| Warranty | 3 years |

ORDERING INFORMATION

BASE UNITS:

| Products | Cat. No. |
|---|----------|
| HLD6000 with CO ₂ hand probe and adapter for CO ₂ calibration The base units include a sniffer line (4.8 m) and a standard sniffer tip (100 mm). | 510-025 |
| Replacement CO ₂ hand probe with 4.8 m sniffer line | 511-045 |
| OPTIONS, ACCESSORIES: | |
| I/O1000 module (input / output module) | 560-310 |
| Profibus module | 560-315 |
| PROFINET IO module | 560-316 |
| Device Net module | 560-317 |
| Ethernet/IP module | 560-318 |
| Other fieldbus systems on request | |
| Data cable (HLD6000-I/O1000): | |
| • 2 m cable length | 560-332 |
| • 5 m cable length | 560-335 |
| • 10 m cable length | 560-340 |

| Products | Cat. No. |
|---|----------|
| Sniffer tip 100 mm | 511-021 |
| Sniffer tip 400 mm | 511-024 |
| Sniffer tip 400 mm pre-bent to half circle | 511-022 |
| Extensions for sniffer tip: | |
| • 400 mm | 511-020 |
| • 500 mm, 45 ° angled | 511-029 |
| Water protection tip | 511-025 |
| Extension for hand probe cable (4.8 m) | 511-040 |
| Adapter for CO ₂ calibration (in basic device HLD6000 with CO ₂ handprobe) | 511-042 |
| External test leak CO ₂ (2-3 x 10 ⁻⁵ mbar·l/s) | 122 32 |
| CONSUMABLES: | |
| Filter holder for sniffer tip (20 pieces) | 511-027 |
| Filter cartridges (20 pieces) | 511-018 |



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Due to our continuing program of product improvements, specifications are subject to change without notice.

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