

- Compact design
- Easy to use
- Visual and audible alarms

## Thermo Scientific GLD Pro Leak Detector

Detect and identify gas leaks quickly and efficiently



### Product Description

The Thermo Scientific GLD PRO Leak Detector is specifically designed for use with gas chromatography (GC) systems. It detects minute leaks of any gas with a thermal conductivity different from air. The reference gas inlet draws ambient air for comparison to air drawn into the sample probe. A leak is indicated by both an LED light display and an audible alarm (Figure 2).

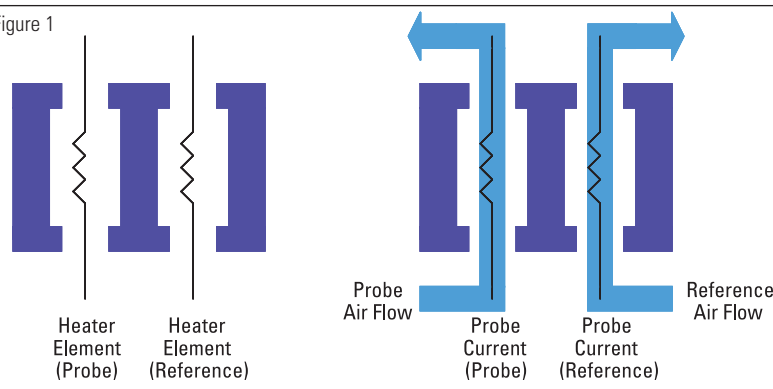
### Operational Principle

The leak detector measurement is based on thermal conductivity comparisons between the probe air and a reference air. The device employs a dual thermistor technology which measures the ratio of [probe]:[reference] heat exchange values and displays the results on an LED scale. Under ideal operating conditions, a ratio of 1:1 indicated identical air samples for both [probe] and [reference], and therefore no leak is present.

Dual analysis is achieved with heater elements positioned in separate flow chambers (Figure 1 left). Probe and reference air streams are simultaneously monitored for thermal conductivity. Differences in air composition are indicated by differences in the heater element currents (Figure 1 right).

Because of slight differences in air temperature and/or humidity between the reference inlet and the probe tip, a small response indicated by a single red or yellow LED light is generally insufficient to positively identify a gas leak. Small to moderate leaks are reliably indicated with four red LED lights, larger leaks are indicated with all red LED lights or yellow LED lights lit and the continuous alarm is audible.

Figure 1



# Product Specifications



## Detection Limits

Gas	Min Detectable Leak Rate (atm cc/sec)	Indicating LED Light Color
Helium	$1.0 \times 10^{-5}$	Red
Hydrogen*	$1.0 \times 10^{-5}$	Red
Nitrogen	$1.4 \times 10^{-3}$	Yellow
Argon	$1.0 \times 10^{-4}$	Yellow
Carbon Dioxide	$1.0 \times 10^{-4}$	Yellow

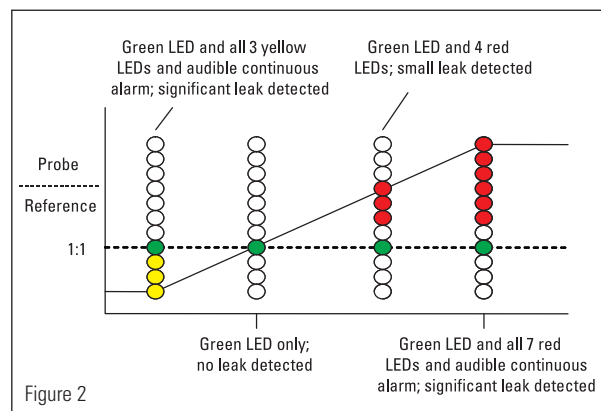
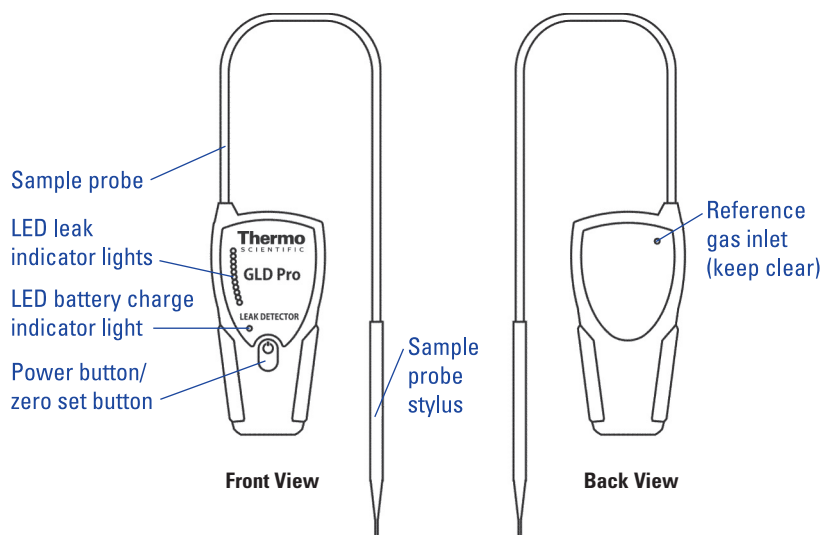
\*Unit not designed for a combustible environment

## Product Specifications

Power Rating:	12 VDC (battery charger supplied)
Battery Rating:	6 hours normal operation
Operating Temp. Range:	32° to 120 °F (0° to 48 °C)
Humidity Range:	0-97%
Warranty:	One Year
Certification(s):	CE and Japan
Compliance:	WEEE, RoHS

## Ordering Information

Description	Part Number
Thermo Scientific GLD Pro	66002-001
Soft Side Carry Case (Leak Detector not provided)	66002-002
Thermo Scientific GLD Pro Small Probe Adaptor	66002-003



For more information, visit the **Chromatography Resource Center** at [www.thermo.com/columns](http://www.thermo.com/columns)

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