The Detecto Pak-Infrared (DP-IR) is an extremely sensitive, advanced leak detector capable of detecting methane without false alarming on other gases. The DP-IR is the latest generation of leak survey instruments from Heath that will greatly improve the productivity and safety of a walking/mobile survey because of high sensitivity and fast response. It is also an effective tool for Method 21 emissions leak detection.

The DP-IR functions by using an infrared optical gas detection system with sample gas pumped into the instrument through a probe. This instrument is intended to replace current surveying equipment using the traditional Flame Ionization with technology utilizing a simple light beam, eliminating the need for expensive gas cylinders and refill systems. It is designed to be selective to detecting methane only, and will not false alarm on other hydrocarbon gases.

The DP-IR operates under a variety of environmental conditions including cold or hot weather. Its rugged design will stand up to normal field use and operating conditions.

The DP-IR has built-in Self-Test and Zero functions to assure the operator the instrument is operating properly. Using the internal calibration cell, the operator can perform the self-test as part of a daily start up routine. While in operation, the DP-IR continuously monitors several parameters to ensure the instrument is functioning properly. Should any of these parameters go outside of the operational limits, an audible alarm will sound and a Fault/Warning error message will be displayed.

Heath Consultants Incorporated operates under a continual product improvement program and reserves the right to make improvements and/or changes without prior notification.
**SPECIFICATIONS**

**Detection Method:** Infrared Controlled Interference
Polarization Spectrometer

**Measurement Range:** 0 to 10,000 PPM; 1 to 100% Gas

**Display Range:**
- **Auto Ranging**
  - PPM: 0-10,000
  - %Gas: 1-100%
- **Manual Ranging**
  - PPM scale: 0-10,000
  - %Gas scale: 0-100%

**Sensitivity:** 1 PPM

**Resolution:**
- 0-1000 PPM: 1 PPM
- 1000-10,000 PPM: 5 PPM
- 1-100%Gas: 0.1%

**Accuracy:** Greater of ±0.5% or ±10% of reading (normal temperature and pressure, % gas on manual mode)

**Response Time:**
- **PPM Mode:** $T_{0.7} < 0.7s$, $T_{1.3} < 1.3s$
- **PPM Mode with Survey Probe:** $T_{1.2} < 1.2s$, $T_{1.8} < 1.8s$
- **%Gas Mode with Method 21 Probe:** $T_{1.8} < 1.8s$, $T_{2.5} < 2.5s$; **Recovery Time** $T_{10} < 2.0s$

**Sample Flow Rate:** 2.0 LPM (with Survey Probe attached)

**Connectivity:** Bluetooth 5 Low Energy (BLE) (compatible with iOS, Android and Windows devices)

**Detection Alarms Modes:**
- Digital Methane Detection (DMD): Audible tone when detection threshold exceeded.
- Adjustable Alarm Level from 1 to 9,000 PPM
- **Tick:** Continuous audio tone relative to concentration

**System Fault Warning:** Audible tone and indication on the display

**Self Test & Calibration:** Built in Self Test and Calibration function verifies operation and adjusts calibration for maximum sensitivity. Test gas cell integrated within the instrument.

**Compliance:**
- EN 61326-1
  - Conducted Emissions Class B
  - Radiated Emissions Class B
  - ANSI C63.4 Class B
  - FCC 47 CFR Part 15 Class B
- EN 61000-4-2 4kV/8kV
- ANSI C63.4 Class B
- EN 61000-4-3 3 V/M
- FCC 47 CFR Part 15 Class B

**Dust Filter:** Replaceable filter provides dust protection. Easy change-out quick disconnect filter cap.

**Display:** Large easy to read backlit LCD (0.75" Numeric)

**Operating Temperature:** 0 to + 122 F (-17 to 50 C) (nominal battery voltage)

**Humidity:** 5 to 95% RH, non-condensing

**Enclosure:** IP54 (Water splash and Dust resistant)

**Instrument Weight:** 5.6 lbs.

**Carry Case:** 13 lbs empty; 21 lbs filled 24.5” x 21” x 9”

**Power Supply:** Internal rechargeable Li-ion battery or External 12 Vdc car battery with power conditioner

**Battery Operating Life:** 8 hours at 32º F without backlight on

**Battery Charger:** External, in-line, 110 - 240 VAC, 50 / 60 hertz. 10 hours to 90% charge

**Shoulder Strap:** Single over the shoulder padded strap

**Alarm Volume:** 108 dBS @ Alarm port (A-fast)

**Survey Probe:** Quick connect fitting with locking clasp. Adjustable length from 25” to 41”

**Bar hole Probe:** Std: 20”; Optional 36”

**Method 21 Probe (optional):** Std: 5’, with quick connect fitting and locking clasp

**Intrinsic Safety:** Class I Division I Group D T3
- UL 913, CSA 22.2 No. 157, MET Labs #E112840

* These features only available on DP-IR+ released January 2020 onwards.