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 natural gas/methane only and will not false alarm on other gases which may be encountered during a normal natural gas pipeline leak survey.

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.
### 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: $T_{0.9} < 0.7s$, $T_{0.9} < 1.3s$
- PPM Mode with Survey Probe: $T_{0.9} < 1.2s$, $T_{0.9} < 1.8s$
- %Gas Mode with Method 21 Probe: $T_{0.9} < 1.8s$, $T_{0.9} < 2.5s$; Recovery Time $T_{0.9} < 2.0s$

### 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

### 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.*