

Recognize the potential for increased safety, significant productivity gains and time-savings with the new RMLD-CS. Remote detection allows utility services personnel and first responders to quickly scan an area for suspected gas leaks at a safe distance.

The HEATH Remote Methane Leak Detector - Complete Solution (RMLD-CS) is a highly advanced technology, capable of detecting methane leaks from a remote distance utilizing the same TDLAS (tunable diode laser absorption spectroscopy) technology as the current RMLD. This instrument eliminates the separate receiver and transceiver, combining them into one hand-held instrument that is lightweight, portable and field rugged. The RMLD-CS makes it possible to detect leaks without having to travel the entire length of the pipe line, thus creating safer surveys in areas that may be difficult to reach such as busy roadways, yards with dogs, fenced off areas and other hard to access places. It operates under a variety of field conditions including a wide temperature range, light rain and fog. Its rugged design will stand up to normal field use and operating conditions and its sensitivity or range is not affected by reasonable amounts of dust on the instrument's window. The RMLD-CS includes many new features including:

- Intrinsically safe
- Rechargeable/replaceable battery
- Dual battery charger
- Mobile App support
- Ergonomic housing
- Lightweight
- Graphical user interface
- Internal data logging
- WiFi
- GPS
- Bluetooth BLE
- Color camera and display

# **SPECIFICATIONS**

# General

Weight 3 lbs (approx.)

**Carry Case Dimensions** 21" x 17.5" x 9.5"

Display 3.5" color LCD, 320 x 240 resolution

# **Power**

Battery Removable Rechargeable Lithium-ion pack, 10.8 VDC at 3.2Ah



**Battery Run Time** 8 hours at 32° F (approx.)

**Battery Charger** External, 110-240 VAC, 50/60 Hz Universal Dual Bay, Delivers 12W at 25°C per battery

**Charge Time** 2-3 hours full charge (approx.)

# **Detection/Measurement System**

**Detection Method** Tunable Diode Laser Absorption Spectroscopy (TDLAS)

**Detection Distance** 100 ft (30m) nominal - may vary due to background type and conditions

**Measurement Range** 0 to 50K PPM-M

Sensitivity 5 PPM-M at distances from 0 to 100 ft (30m)

**Beam Size** Conical in shape with a 22" diameter at 100 ft (55cm at 30m)

Lasers **IR Laser** Class I

> **Green Spotter** Class 2(II) <5mW @ 510-530 nm Spot size is 7mm at 15M

Complies with 21 CFR 1040.10 and 1040.11 except for deviations pursuant to Laser Notice No. 50, dated June 24, 2007

Laser Eye Safety Warning Do not stare into beam or view directly with optical instrument

#### **Color Camera**

Aperture f/2.6

FOV 94DEG (at 6.0mm image circle)

# **GNSS Compatibility**

GPS GLONASS Beidou Galilieo

#### Communication

USB Dual Mode - flash drive and communications USB Port Max Rating: Um = 5V, In = 5 A Bluetooth 4.2 BLE

WiFi b/g

# Alarms

**Digital Methane Detection (DMD)** Audible tone and visual alerts when detection threshold exceeded

Adjustable Detection Alarm Level 1 to 999 PPM-M

Alarm Response Time Typically 0.1 - 0.2 seconds

Real Time (RT) Continuous beep rate relative to concentration from 10-1000 PPM-M

System Fault & Warnings Audible alarm and visual indication on the display

# Testing

Built-In Self-Test Verifies operation and adjusts laser wavelength for maximum sensitivity

**Test Gas Cell** Integrated within carrying case





# **Operating Conditions**

**Operating Temperature** 0° to +122° F (-17° to 50° C)

Humidity 5 to 95% RH, non-condensing

Altitude Up to 2000M

**Environment of Use** Pollution degree 2 or better Outdoor use

# Regulatory

Ingress Protection IP54 (water splash and dust resistant)

Compliance EMC (EN61000-6-2, EN6100-6-4)

Low Voltage Directive (2014/35/EU)

Radio Equipment Directive (2014/53/EU)

ETSI EN 301 489-1 v2.2.0 EN 61326-1:2013 47 CFR Part 15 & ICES-003

# **Ordinary Location Safety**

UL 61010-1 CAN/CSA-C22.2 No 61010-1-12

#### **Hazardous Location Safety**

Class I, Zone 2, AEx ic op is IIA T4 Gc Class I, Division 2, Group D Intrinsically Safe

# **Ordering Information**

RMLD-CS - HPN 105301 Includes carry strap, case, battery charger, power supply, USB cable, one battery pack, gas calibration test cell

IS Battery Pack - HPN 105727 Li-ion replacement battery

Battery Charger Base - HPN 105358 Battery Charger Cable - HPN 105359 Charges two batteries at one time

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