Harmonic Fingerprint™ Much like forensic fingerprint ID, the Harmonic Fingerprint™ uses multiple identifiers in the absorption analysis of the target gas to eliminate false alarms.

SimuGas™ Only the Senscient ELDS™ can check and record functional tests automatically everyday.

Zero Maintenance The system does not require consumable sensing elements or calibrations, significantly reducing operation costs for time and materials spent on maintenance.

Tuneable Lasers Class 1 eye safe lasers penetrate thick fog, heavy rain, and snow further than differential infrared based detectors.


Lock Cell A real target gas sample eliminates laser drift and maintains Harmonic Fingerprint™ lock continuously all day.

Open path methane (CH₄) gas detectors are used to monitor for fugitive emissions and protect plants from the risk of explosion by detecting leaks faster and over a larger area than is feasible with point detection. These devices are typically located around the perimeter of a plant, process or storage area; or positioned in close proximity to specific items of a plant, that pose a real risk of gas escape: e.g. compressors, pump sets, pressure reducers, valves and pipe flanges.

Single point verification Low false alarm rejection

Four point verification Highest false alarm rejection

NO GAS TARGET GAS INTERFERENT GAS HARMONIC IDENTIFIER
**Specifications**

**Gas**
- Methane (CH₄)

**Ranges**
- 0-1 LEL m
- 0-5 LEL m
- 0-1000 ppm - SEE NOTE 1 BELOW

**Path Length**
- 5-40 m OR 40-120 m OR 120-200 m
  (16-131 ft OR 131-394 ft OR 394-656 ft)

**Format**
- Individual Transmitter (Tx) & Receiver (Rx)

**Performance**

**Response Time**
- T₉₀ ≤ 3 Seconds

**Repeatability**
- <± 5% FSD

**Linearity**
- <± 5% FSD

**Environmental**

**Ingress Protection**
- IP66/67 NEMA TYPE 4/4X/6

**Enclosure Material**
- 316L Stainless Steel

**Lens Material Tx**
- Faceted Optical Glass

**Lens Material Rx**
- Aspheric Optical Glass

**Operating Temperature**
- -55°C TO +60°C (AMBIENT) [-67°F TO 140°F]

**Humidity**
- 0 - 100% RH (NON-CONDENSING)

**Vibration**
- 10 - 150 Hz, 2 g

**EMC**
- EN50270

**Certification/Approvals**

**CSA and UL:**
- CUSTOMS UNION OF RUSSIA
- Kazakhstan & Belarus:
  - CLASS I DIV 1 GROUPS B, C & D T5
- CLASS II DIV 1 GROUPS E, F & G T5
- CLASS III DIV 1
  - Ex-i/ibT5/H2X ENTRY: M25
- CLASS I ZONE 1, AEx d IIB + H2 T5
  - T₉₀ = -40°C TO +60°C [-40°F TO 140°F]
  - INMETRO:
    - ENTRY: 3/4" NPT
  - Ex d IIB + H2 T5 Gb
  - Ex tb IIIC T100°C Db IP66/67
  - IECEx:
    - Ex d IIB + H2 T5
    - T₉₀ = -40°C TO +60°C [-40°F TO 140°F]
    - ENTRY: M25
  - II 2 GD Ex d IIB + H2 T5
    - T₉₀ = -40°C TO +60°C [-40°F TO 140°F]
    - Db IP66/67
    - ENTRY: M25

**Optical**

**Alignment**
- ± 0.5°

**Obstruction**
- OPERATES UP TO 95%

**Heated Optics**
- Tx & Rx LENSES ARE CONTINUOUSLY HEATED

**Laser Beam**
- CLASS 1 (EYE SAFE) IEC 60825-1

**FDA Accession No.**
- 1410373-000 (FOR IMPORTS INTO USA)

**Calibration**

FACTORY CALIBRATED FOR LIFE, NO ROUTINE CALIBRATION REQUIRED.

**Ordering Information**

**Gas Type:**
- CH₄

**Measuring Range:**
- E.G. 0-1 LEL m

**Path Length:**
- E.G. 5-40 m

**Certification:**
- E.G. ATEX

**Accessories**

**Interface Terminal (Tablet)**

**Optical Alignment Scope**

**Gassing Cell (Optional)**

**Snow Cowl (Optional)**

**Mechanical**

**Size**
- Tx/Rx 140 mm DIA X 300 mm (5.5" DIA X 11.8")

**Weight**
- Tx/Rx 12 kg (26.5 lbs) EACH (C/W BRACKET)

**Sun/Deluge Protection**
- Tx & Rx SUPPLIED WITH SUN SHIELD/DELUGE PROTECTION

**Mounting**
- Tx & Rx SUPPLIED WITH MOUNTING BRACKETS INCORPORATING FIXING HOLES / SLOTS FOR FLAT SURFACE OR METAL POLE MOUNTING.
  (NOTE: MOUNTING POLES SHOULD BE OF 4" TO 6" [100 mm TO 150 mm] DIAMETER, FIXING BOLTS / U BOLTS ARE NOT SUPPLIED)

**Notes**

NOTE 1: ONLY AVAILABLE IN 5-40 m AND 40-120 m PATH LENGTHS

**Notes**

Note: This bulletin contains only a general description of the products shown. While uses and performance capabilities are described, under no circumstances shall the products be used by untrained or unqualified individuals and not until the product instructions including any warnings or cautions provided have been thoroughly read and understood. Only they contain the complete and detailed information concerning proper use and care of these products. Specifications subject to change without notice.

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