Groveley Detection have been manufacturing fire and gas detection products for use in hazardous areas since 1991.

We have designed and manufactured ultrasonic gas leak detectors since 2006 and have supplied extensively to the oil and gas industry for both onshore and offshore applications.

The GDU-Incus is an ultrasonic gas leak detector for detecting airborne ultrasound generated from pressurised gas leaks.

The detector comprises four independent sensing heads designed using Groveley’s patent pending floating crystal technology. The ceramic piezo-electric sensor heads are encased in a metallic housing and sealed against the harshest of environments. The design ensures full functionality from -40°C to +85°C (-55°C option).

Each sensor is free of moving parts and will not age, drift or need replacing during normal working conditions.

**BENEFITS**

- Provides area coverage to detect pressurised gas leaks
- Largest area coverage available
- Detects smaller leaks than all other UGLD
- Unaffected by weather conditions
- No calibration required
- Simple to maintain with remotely operated test tool.
- Can be mounted horizontally or vertically
- Continuous self test
- HART ® enabled (Option)

ProDetec Pty Ltd Ph: +61 2 9620 8700; info@prodetec.com.au
TECH SPEC

GENERAL
• Sensor: Floating piezoceramic
• Detects pressurised gases above 2 barG
• Calibration factory set - no field calibration required

POWER
• Supply: 24V DC, Nominal 15 – 30V DC
• Current consumption: 250mA normal operation (3.2A maximum using -55°C heated option)
• Cable entry: 2 x M20 (M25, 1/2” NPT, 3/4” NPT option)

PHYSICAL
• Dimensions: Ø210 x 272mm
• Enclosure:
  • Stainless steel AISI 316
  • Weight ≈ 18Kg

APPROVALS
• ATEX Ex d IIB+H2T4 Gb (Tamb -55°C to +85°C)
• IECEx ITS 10.0004X
• GOST K
• Suitable for use in SIL 2 systems
• EMC: EN 50270 2006
  EN 61000-6-3 2007
  EN 61000-6-2 2005

OUTPUTS
• Analogue: Current source 4 – 20mA
  (Option Current sink 4 – 20mA)
• HART® enabled (Option)
• Relay: 2 relays for alarm and fault
  (Load: 1.4A max. switch voltage 30V DC max)
• Digital: RS485 interface

PERFORMANCE
• Frequency range: 25kHz to 100kHz
• Dynamic range:
  • Standard 50 to 140 dB
  • Option 58 to 104 dB

• Relative humidity: 0 to 100%
• Ingress protection: IP66 / IP67

PATENT
• Worldwide pending

AREA COVERAGE
• Incus coverage up to 40m Radius
  (ambient noise dependant)

Leak rate = 0.1 Kg/s (Methane)
Area covered is reduced for both lower gas pressure and / or higher background noise.
Area coverage is increased for higher pressures and / or lower background noise.

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SPECIFICATION SUBJECT TO CHANGE WITHOUT NOTICE
Ref: DS-GDU-Incus-R14

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