**ProCeas®**

**H₂S LNG analyzer**

Low level H₂S in detection in Liquified Natural Gas**

- The ProCeas® H₂S is a complete pre-calibrated laser infrared spectrometer for low level detection of H₂S in natural gas and liquefied natural gas (LNG).
- The ProCeas® H₂S uses the patented OFCEAS (WO 03031949) IR Laser technology for enhanced specificity, selectivity, accuracy and stability (no instrumental response drift).  
- The ProCeas® H₂S uses a patented low-pressure sampling system (WO 2010058107) enabling low-cost installation thanks to non-heated lines* and reduced maintenance.
- The ProCeas® H₂S is a complete, reliable, robust, low-cost and easy-to-use solution for the H₂S analysis natural gas processes.

**ProCeas®**

Advantages & Benefits

- **DIRECT MEASUREMENT**
  OFCEAS technology associated with low pressure sampling enables direct measurement. The low pressure in the sampling system removes any risk for chemicals adsorption/desorption and condensation in the line.

- **NO INTERFERENCE**
  OFCEAS technology associated with low pressure sampling provides exceptional selectivity, enabling simultaneous multi-component measurement without interferences, regardless of the matrix.

- **NO RE-ZERO; NO DRIFT**
  The zero information is contained in the signal, enabling automated and intrinsic re-zero of the analyzer.

- **EASE-OF-USE**
  The ProCeas® is pre-calibrated for your application. Initially packaged in a standard 19" rack, it includes a touch screen interface and on-board PC for local / remote control and real time display / recording of results.

- **EASE-OF-INTEGRATION**
  The ProCeas® allows digital (Ethernet, RS485, RS232, ModBus), analog and TDR I/O’s.

- **ROBUSTNESS**
  The ProCeas® contains no optical moving parts and was designed and built strictly for industrial and on-board mobile applications.

- **LOW MAINTENANCE**
  High MTBF.
  In addition to containing no moving optical components, the IR sources (telecom type laser) are characterized by MTBF’s of 5 years.

- **CLEAN LINES / FILTERS**
  The low pressure sampling system enables low flow rates (3-9 L/h) without degrading response time. Accumulation of contaminants lines and filters is greatly reduced.

- **SAFE**
  ATEX compliant configuration available.

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* Requires ambient temperature > 10°C and H₂O < 65 % vol

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**C₁**: 100%
**C₂**: 20%
**C₃**: 15%
**C₄**: 5%
**C₅⁺**: 2%
**C₀₂**: 20%
**H₂O**: 2%
**LAYOUT FROM SONIC NOZZLE TO ProCeas ANALYZER**

- **Sonic nozzle**
  - 3 - 9 L/h

- **2μm filter**
  - Passivated rock wool

- **Polytube**
  - 2 PFA ½” cores

- **Heated line option**

- **Sample**
  - 30 to 90 L/h @ 100 mbar

- **Standardized gas**
  - + Backflush

- **Standardized gases**
  - 1 regulated bar

- **Air conditioned room**

- **ProCeas**
  - 2.45 ppm

- **Oil / dust free dry air (6 bar ± 0.5 bar)**

- **110/220V 50/60 Hz 3A**

- **Remote analog / digital I/O’s option**

- **Jbus - Modbus RS232 / 485 / ETH outputs**

- **USB ports**
  - (keyboard, mouse, data...)

- **Exhaust**
  - 3-9 L/h @ P° Atm

- **Pump**

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**INSTALLATION REQUIREMENTS**

- **Operating Temp.**
  - 15-35°C - Standard
  - 10-40°C - Optional

- **Power supply**
  - 200 W - 110-220VAC - 50-60Hz

- **Compressed Air**
  - 1-6 bar (oil free), Not provided