Natural Gas Quality Analytical Measurements

The Most Reliable Solutions for Accurate Analysis of H₂O, H₂S, CO₂, and O₂ in Natural Gas
The leading global provider of laser-based process instrumentation

SpectraSensors develops and markets world class laser-based on-line analytical instrumentation for the natural gas, gas processing, petrochemical and atmospheric markets. The company’s technology center is located in Rancho Cucamonga, California, while its company headquarters operate in Houston, Texas, U.S.A.

Since 1999, SpectraSensors has further developed Tunable Diode Laser technology developed initially at NASA's Jet Propulsion laboratory. Over USD $30 million has been invested during this period resulting in the introduction and strong market acceptance of robust and reliable analyzers for the harsh applications typical in hydrocarbon processing industries.

SpectraSensors has been recognized by many independent organizations as a leading technology manufacturer and has delivered exceptional growth results as well as high levels of customer satisfaction.

Reliable Measurements for Demanding Operations

Natural gas industry requires a high degree of confidence in gas quality measurements across their infrastructures as well as competitive long term cost of ownership. SpectraSensors natural gas quality measurements are driven by our customer need to effectively meet requirements in these areas:

- Pipeline Integrity
  - Asset Protection Due To Internal Corrosion
  - Black Dust Control
  - Regulatory Compliance
  - Safety
- Custody Transfer – Product Specification
- Operational Efficiency

SpectraSensors offers complete measurement solutions for H₂O, CO₂, H₂S, and O₂:
Sample Extraction, Sample Conditioning, Gas Analyzer and Software Interface for Natural Gas Quality Measurements

Sample Extraction and Preconditioning Products

H₂S
SpectraSensors Analyzer Management Software

Our customers operate in harsh and remote environments. SpectraSensors AMS100 software allows users to monitor analyzers by connecting locally or remotely to:

- Monitor Analyzer Health
- Configure
- Troubleshoot, Diagnose and Service
- Data-Logging and Trend Parameters
- AMS100 Supports Modbus over Ethernet, Dialup or Serial Connections
SpectraSensors Advantage

SpectraSensors, on the forefront of TDL Spectroscopy R&D, leads with the highest level of expertise in optics, laser spectroscopy and process interface design. With an exhaustive patent portfolio, the company delivers world-class value to its customers.

Since its inception, the company was first to introduce TDL measurements in natural gas and has proven over 50 applications in the most demanding environments. The company has delivered over 6,000 analyzers to oil and gas companies worldwide maintaining high levels of customer satisfaction. The fast adoption of SpectraSensors analyzers speaks for itself about the company’s preferred vendor position when it comes to reliable natural gas quality measurements.

Technology Drives Reliability and Availability

- No Contamination of Sensors by Glycols, Methanol, Corrosives
- Fast Speed of Response
- Lowest Cost of Ownership
- Remote Monitor, Diagnose and Repair
- Immune to Interferences from Components in Gas Sample

Trace H₂S Analyzers

The SpectraSensors H₂S analyzer system retains the analytical benefits and reliability known by TDL moisture users. SpectraSensors offers “2-pack” and “3-pack” systems where H₂O, CO₂ and H₂S are combined in one integrated system and with one common technology. This translates into…

- No Light Source Replacements
- No Tape
- No Field Calibration. Only Validation.
- Reduced Cost of Ownership
  - Training Requirements Simplified
  - Remote Diagnostics and Repair - Analyzer Management Software
  - Simplification via One Technology for Main Measurements
  - Reduced Footprint