SS1000 Single Channel H_2O Gas Analyzer Datasheet

For natural gas

Key Features

- Virtually maintenance free
- No interference from glycol, methanol or amine contaminants (vapor phase)
- Fast and accurate real-time measurements
- No wet-up or dry-down delays
- Short term payback; no consumables
- NIST-traceable calibration

SpectraSensors SS1000 Portable is a light weight, easy to handle, battery-powered H_2O analyzer, used to verify measurements and for spot-checking when other methods provide questionable results.

In natural gas pipeline applications, poor quality measurement results are extremely costly. Additional processing or dehydration costs, upset conditions, shut-ins and inconsistent process results may be caused by sensors that do not perform properly. The SS1000 reveals poorly performing sensors, pinpoints high moisture and can be used as a standard for measurement validation.

Rapid response time The SS1000 allows for fast, simple operation. The analyzer's laser and detector take measurements 4 times per second and average the results. These real-time measurements are not hampered by wet-up (absorption) or dry-down (desorption) as with surfaced-based sensors.

Reliable Using state-of-the-art laser technology developed by NASA, the SS1000 analyzer is more reliable, with greater repeatability than surface based sensors and is not subject to the interpretation errors of a chilled mirror.

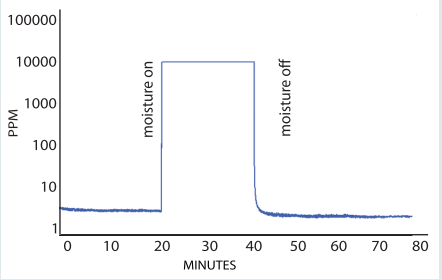
Reliability and speed are ultimately critical in process measurements, especially with a portable unit. The SS Series Sensors are the fastest, most dependable method for accurate moisture measurements.

No interference As with all SpectraSensors analyzers, the SS1000 combines a patented laser with control electronics and "smart" software. The analyzer's sensor heads are not subjected to corrosives or contaminants in the gas because the sensor is isolated from the sample gas stream.

The result is an analyzer which does not suffer from contamination or drift due to vapor impurities such as glycol, methanol, amines, hydrogen sulfide, or mercaptans.

Payback The SS1000 very quickly pays for itself by eliminating the cost of consumables, extra sensor heads, factory calibrations, labor, and overhead associated with excessive maintenance. Expensive problems caused by unreliable gas measurements such as added processing steps and poor gas quality can be eliminated.

Instant response from a sudden introduction and interruption of a moist stream of air into the SS1000 sample cell.



SpectraSensors®
An Endress+Hauser Company

Specifications

Application Data	
Target Components	H_2O in Natural Gas
Measurement Performance	Refer to Application Note (AN 10101)
Principle of Measurement	Tunable Diode Laser Absorption Spectroscopy
Environmental Temperature Range	-20˚ to 50˚C (-4˚ to 122˚F)
Sample Cell Pressure Range	700-1400 mbara
Sample Cell Temperature Range	-20˚ to 50˚C (-4˚ to 122˚F)
Maximum Cell Pressure	70kPag (10 PSIG)
Electrical Data	
Power Supply	100-240 VAC, 50-60 Hz - standard 12-Volt, Sealed Lead-Acid Battery Approx. 8 hours usage time per charge
Max Current	0.5A @ 120 VAC during recharging
Controller to Cell Cable Length	1 m - standard (3 m, 5 m & 10 m - optional)
Communication	RS232C - all parameters
LCD Display	Concentration, Cell Pressure and Temperature & Diagnostics
Physical	
Dimensions	Nominal 200 mm H × 175 mm W × 450 mm D (8 × 7 × 18 inches)
Weight Approximately	Approx. 6.8 kg (15 lbs)
Sample Cell Dimensions	438 mm H x 108 mm W (17¼ H x 4¼ W inches)
Sample Cell Construction	316L Series Polished Stainless Steel - standard
Number of Sample Cells	1
Area Classification	
Certification	Non-Hazardous (certified) locations - General Purpose

Contact

4333 W. Sam Houston Pkwy N.
Suite 100
Houston, TX 77043

Tel +1 713 300 2700
+1 800 619 2861
Fax +1 713 856 6623

sales@spectrasensors.com
service@spectrasensors.com
www.spectrasensors.com

SpectraSensors®
An Endress+Hauser Company