

# SpectraSensors SS500 Mid-Sensitivity Moisture Analyzer

## 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*
- *Reliable in Harsh Environments*
- *Short Term Payback; No Consumables*
- *NIST-Traceable Calibration*
- *Analog and Digital Outputs for Remote Monitoring*



Ask about other available products:

*SS3000 Dual Channel Gas Analyzer*



**SpectraSensors SS500** has a lower detection limit of 2 lbs per Million SCF Natural Gas. Other than the reduced detection limit, the SS500 has all the benefits of the SS2000 including:

### RELIABLE AND TRUSTWORTHY MEASUREMENTS

Analysis software measures the amount of laser light absorbed by water molecules. This very sensitive method provides reliable readings because of the very specific wavelength that is being analyzed.

### FAST RESPONSE TIME

The laser, detector, software and electronics are extremely fast. 4 measurements are taken every second. The display updates every 0.25 to 2 seconds (adjustable).

### NO CONSUMABLES

The SS-Series sensor heads do not need regular in-field or factory calibration. The sensor heads do not need to be periodically reconditioned. The sensor does not make contact with the gas so it does not get contaminated.

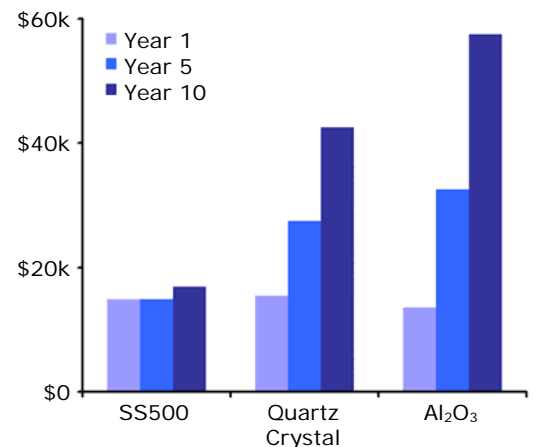
### NO INTERFERENCE

Gases such as methanol, amines and glycol are not a problem for the SS Series product line because of the "line-spectroscopy" technique that is employed. The technique relies on information at very narrow wavelength ranges where the water spectrum is completely isolated.

### PAYBACK

A short payback period can be realized by eliminating the cost of consumables, extra sensor heads, and the labor and overhead associated with excessive maintenance.

Additionally, intangible (but real) costs associated with unreliable gas measurements can be reduced. For example, added processing steps, poor gas quality and the possibility of costly damage to equipment can result from sensors that produce incorrect data. The potential savings easily justify the need for a reliable, fast and maintenance free solution such as the SpectraSensors SS500 moisture analyzer.



*Comparison Graph ▲  
Demonstrates the ongoing impact to the bottom line. Compare the cost of ownership of the SS500 to the competition.*

**SpectraSensors™**

# SS500

## Mid-Sensitivity Moisture Analyzer

### Specifications



#### Performance

Moisture Concentration (H <sub>2</sub> O)*	2 to 20 lbs/MMSCF Nat. Gas 42-422 ppmv, NIST Traceable
Accuracy (H <sub>2</sub> O)	±2% of reading or ±10 ppmv
Dew/Frost Point	-58° to -20° F (-50° to -29° C)
Response time**	Display updates 0.25-2 seconds (software adjustable)

\* Consult factory for alternative ranges

\*\* Flow Rate Dependant - Sample cell volume is 0.005 ft<sup>3</sup>. Time to displace cell volume at a flow of 2 scfh is ~10 sec.

#### Environmental Range

Temperature	-4° to 122° F (-20° to 50° C)
Inlet Pressure	10 to 25 PSIA, <b>10 PSIG Maximum</b> (70-170 kPa Abs, <b>70 kPaG Maximum</b> )
Sample Cell Construction	316L Series Polished Stainless Steel
Sample Flow Rate	0.2 to 20 SCFH (100-10,000 cc/min)
Contaminant Sensitivity	None for gas phase glycol, methanol, amines, hydrogen sulfides or mercaptans

#### Power Requirements

Input Voltage	100-240 VAC, 50-60 HZ Standard 9-16 VDC or 18-32 VDC Optional
Current	1 amp maximum @ 120VAC 1.6A @ 24VDC, 3.2A @ 12 VDC

#### Physical Specifications

Outputs	Generic or Modbus RS232 (all parameters) 4-20mA loop (concentration only)
LCD Display	Concentration, Cell Pressure and Cell Temperature
Enclosure Type	NEMA 4X – Fiber Reinforced Plastic NEMA 4X – Stainless Steel Optional
Size	18"H x 16"W x 5.5"D (457mm H x 406mm W x 140mm D)
Weight	w/FRP Enclosure - Approx. 13lbs (6Kg) w/SS Enclosure - Approx. 25lbs (11.5Kg)