

SS500 moisture analyzer

Extremely reliable and tailored to the needs of the natural gas industry



More information and current pricing:

www.us.endress.com/SS500

Benefits:

- Economical real-time moisture measurements
- Virtually maintenance-free
- Reliable in harsh environments
- Fast and accurate with no wet-up or dry-down delays
- No contamination or drift due to vapor impurities such as glycol, methanol, amines, hydrogen sulfide, or mercaptans
- NIST-traceable calibration with analog and serial outputs for remote monitoring
- CSA certified for CSA Class 1, Division 2 or Class 1, Division 1

Specs at a glance

- **Measured Variables** Concentration Dew Point Cell Pressure Cell Temperature
- **Hazardous area approvals** CSA Class I, Division 1 CSA Class I, Division 2 CSA Class I, Zone 2

Field of application: Using patented tunable diode laser spectroscopy (TDLAS) technology, the SS500 analyzer is an economical choice for measuring H₂O concentration in natural gas without coming into physical contact with the stream. The result is a sensor that does not suffer from contamination or drift due to vapor impurities such as glycol, methanol, or amines.

Features and specifications

H2O

Measuring principle

TDLAS

H2O

Product Headline

An economical gas analyzer for moisture (H2O) in the natural gas industry. The sensor measures gas using Tunable Laser Diode Absorption Spectroscopy (TDLAS) to determine the concentration of the gas without coming into physical contact with the stream. Option of simplified sample conditioning to reduce complexity of the analyzer system.

Channels

1

Analyte and Measurement ranges

H2O (Moisture): 5-422 to 5-2110 ppmv

Measured Variables

Concentration

Dew Point

Cell Pressure

Cell Temperature

Ambient Temperature range

-20 to 50°C (-4 to 122°F)

Operating Pressure range

Inlet Pressure: 140-350 kPa (20-50 psig)

Sample Cell: 700-1400 mbara

Analyzer Wetted materials

316L Stainless Steel

FKM O-Rings

Glass

Power supply

100-240 VAC, 50-60 Hz

OR

9-16 VDC or 18-32 VDC - optional

1 Amp maximum @ 120 VAC

1.6 Amps @ 24VDC, 3.2 Amps @ 12 VDC

H2O

Communication

Analog Output: 1 or 2 4-20mA Isolated, 1200 ohms @ 24 VDC max load

Serial: RS232C

Protocol: Modbus Gould RTU or Daniel RTU or ASCII

Alarms: 2, General Fault and Concentration Alarms via Modbus and Analog Output(s)

Housing materials

Electronics: 304 Stainless Steel (Class I Div 2)

Electronics: Cast Aluminum (Class I Div 1)

Sample System Panel: anodized aluminum

Hazardous area approvals

CSA Class I, Division 1

CSA Class I, Division 2

CSA Class I, Zone 2

Degree of protection

Type 3R (Class I Div 2)

Type 4 (Class I Div 1)

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