

SS3000 dual channel H₂O & CO₂ gas analyzer

Rapid response time and trustworthy H₂O & CO₂ measurements for the natural gas industry



More information and current pricing:
www.de.endress.com/SS3000

Benefits:

- Accurate, real-time H₂O and CO₂ measurements using one analyzer
- Reliable in harsh environments and virtually maintenance-free
- Fast and accurate with no wet-up or dry-down delays
- Low cost of ownership, no consumables
- No contamination or drift due to vapor impurities such as glycol, methanol, amines, hydrogen sulfide, or mercaptans
- Analog and serial outputs for remote monitoring
- CSA certified, Class 1, Division 2

Specs at a glance

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

Field of application: The SS3000 analyzer is capable of measuring moisture (H₂O) and carbon dioxide (CO₂) in this cost-effective 2-channel system which incorporates two sensors into one analyzer. Both sensors measure gas using patented tunable diode laser absorption spectroscopy (TDLAS) technology to determine the concentration of H₂O and CO₂ without coming into physical contact with the stream.

Features and specifications

H2O+CO2**Measuring principle**TDLAS

Product Headline

Dual channel gas analyzer for moisture (H2O) and carbon dioxide (CO2). 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.

Channels2

Analyte and Measurement ranges

H2O (Moisture): 0-100 to 0-5000 ppmv

CO2 (Carbon Dioxide): 0-5% to 0-50%

Measured Variables

Concentration

Moisture Dew Point

Cell Pressure

Cell Temperature

Ambient Temperature range

-20 to 50°C (-4 to 122°F)

Optional: -10 to 60°C (14 to 140°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

H2O+CO2**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 @ 24 VDC, 3.2 Amps @ 12 VDC

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

Housing materials

Electronics: 304 Stainless Steel

Sample System Panel: Anodized aluminum

Hazardous area approvals

CSA Class I, Division 2

CSA Class I, Zone 2

Degree of protection

Type 3R

H2O+H2O**Measuring principle**

TDLAS

Product Headline

Dual channel gas analyzer for two moisture (H2O) channels. 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.

Channels

2

H2O+H2O**Analyte and Measurement ranges**

H2O (Moisture): 0-100 to 0-5000 ppmv

Measured Variables

Concentration
Moisture Dew Point
Cell Pressure
Cell Temperature

Ambient Temperature range

-20 to 50°C (-4 to 122°F)
Optional: -10 to 60°C (14 to 140°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 @ 24 VDC, 3.2 Amps @ 12 VDC

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

H2O+H2O

Housing materials

Electronics: 304 Stainless Steel

Sample System Panel: Anodized aluminum

Hazardous area approvals

CSA Class I, Division 2

CSA Class I, Zone 2

Degree of protection

Type 3R

More information www.de.endress.com/SS3000