

SS2000E



More information and current pricing:

www.at.endress.com/SS2000E

Benefits:

- Accurate real-time H₂O or CO₂ measurement
- Virtually maintenance-free, reliable in harsh environments with analog and serial outputs for remote monitoring
- 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
- Low cost of ownership and no consumables
- Heated and unheated stainless steel sample conditioning enclosures with NEMA-4X system rating
- 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 SS2000e single channel analyzer is extremely reliable and tailored to the needs of the natural gas industry. The sensor measures H₂O or CO₂ in gas using patented tunable diode laser absorption spectroscopy (TDLAS) technology to determine the concentration of the gas without coming into physical contact with the stream.

Features and specifications

H₂O

Measuring principle

TDLAS

H2O

Product Headline

Single channel 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. Includes a heated enclosure for the sample conditioning system.

Channels

1

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 or 700-1700 mbara (optional)

Analyzer Wetted materials

316L Stainless Steel
FKM O-Rings
Glass

Power supply

100-240 VAC, 50-60 HZ
OR
18-24 VDC - optional
1 Amp maximum @ 120 VAC , 1.6 Amps @ 24 VDC (unheated)
2 Amps maximum @ 120 VAC (heated)

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|-----|--|
| H2O | <p>Communication Analog: Two 4-20mA Isolated, 1200 ohms @ 24 VDC max load Serial: RS232C - standard, RS485 and Ethernet - optional Protocol: Modbus Gould RTU or Daniel RTU or ASCII Digital Outputs: 2, General Fault and Concentration/Assignable Alarm</p> <hr/> <p>Housing materials Electronics: 304 or 316L Stainless Steel Sample System Enclosure: 4X 304 or 316L Stainless Steel</p> <hr/> <p>Hazardous area approvals CSA Class I, Division 2 CSA Class I, Zone 2</p> <hr/> <p>Degree of protection Type 4X</p> <hr/> |
| CO2 | <p>Measuring principle TDLAS</p> <hr/> <p>Product Headline Single channel gas analyzer for carbon dioxide (CO2) 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. Includes a heated enclosure for the sample conditioning system.</p> <hr/> <p>Channels 1</p> <hr/> <p>Analyte and Measurement ranges CO2 (Carbon Dioxide): 0-5% to 0-50%</p> <hr/> <p>Measured Variables Concentration Cell Pressure Cell Temperature</p> <hr/> |

CO2

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 or 700-1700 mbara (optional)

Analyzer Wetted materials

316L Stainless Steel

FKM O-Rings

Glass

Power supply

100-240 VAC, 50-60 HZ

OR

18-24 VDC - optional

1 Amp maximum @ 120 VAC , 1.6 Amps @ 24 VDC (unheated)

2 Amps maximum @ 120 VAC (heated)

Communication

Analog: Two 4-20mA Isolated, 1200 ohms @ 24 VDC max load

Serial: RS232C - standard, RS485 and Ethernet - optional

Protocol: Modbus Gould RTU or Daniel RTU or ASCII

Digital Outputs: 2, General Fault and Concentration/Assignable Alarm

Housing materials

Electronics: 304 or 316L Stainless Steel

Sample System Enclosure: 4X 304 or 316L Stainless Steel

Hazardous area approvals

CSA Class I, Division 2

CSA Class I, Zone 2

Degree of protection

Type 4X

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