

SS2100气体分析仪

特别可靠地进行痕量气体组份测量



优势:

- 高精度实时测量结果
- 低使用成本；无需耗材，几乎无需维护，在严苛工况下可靠测量
- 单台分析仪最多可以同时测量3种气体组份（双组份或三组份）
- 测量结果不受气体湿润（吸收）或干燥（解吸）的影响
- 同表面传感器相比，重复性更高
- 模拟量输出和串行输出信号，支持远程监控
- 可以测量下列气体组份： H_2O 、 CO_2 、 H_2S 、 NH_3 、 C_2H_2

产品规格参数

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

详细信息和最新价格参见:

www.endress.com.cn/SS2100

应用领域: SS2100气体分析仪采用专利的TDLAS可调谐激光二极管吸收光谱技术，对特定气体组份（ H_2O 、 CO_2 、 H_2S 、 NH_3 和 C_2H_2 ）进行高精度测量，消除了传统红外线分析仪常见干扰的影响。SS2100分析仪维护工作量低，无需重新校准或定期更换部件。

特征和规格

H2S

测量原理

TDLAS

Product Headline

An advanced gas analyzer for hydrogen sulfide (H_2S) measurement. The SS2100 uses Tunable Laser Diode Absorption Spectroscopy (TDLAS) to determine the concentration of the analyte without coming into physical contact with the stream.

H2S

Channels

1

Analyte and Measurement ranges

H2S (Hydrogen Sulfide): 0-10 to 0-1000 ppmv; 0-5000 ppmv to 0-5%

Measured Variables

Concentration

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: 800-1200 mbara or 950-1700 mbara (optional)

Analyzer Wetted materials

316L Stainless Steel

FKM O-Rings

Glass

Power supply120 or 240 VAC \pm 10%, 50-60 Hz, 300W

(18-24 VDC - optional for electronics only)

3 Amps max @ 120 VAC , 1.5 Amps max @ 240 VAC Hz

Communication

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

Serial: RS232C and Ethernet

Protocol: Modbus Gould RTU or Daniel RTU or ASCII

Digital Outputs: 5, Concentration Alarm, General Fault, Validation Fail,

Validation 1 Active, Validation 2 Active

Digital Inputs: 2, Flow Alarm, Validation Request

H2S

Housing materials

Electronics: 304 or 316L Stainless Steel

Sample System Enclosure: 304 or 316L Stainless Steel

Hazardous area approvals

CSA Class I, Division 2

CSA Class I, Zone 2

Degree of protection

IP66, Type 4X

H2O

测量原理

TDLAS

Product Headline

An advanced gas analyzer for moisture (H2O) measurement. The SS2100 uses Tunable Laser Diode Absorption Spectroscopy (TDLAS) to determine the concentration of the analyte without coming into physical contact with the stream.

Channels

1

Analyte and Measurement ranges

H2O (Moisture): 0-10 to 0-100 ppmv; 0-50 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)

H2O	Operating Pressure range Inlet Pressure: 140-350 kPa (20-50 psig) Sample Cell: 800-1200 mbara or 950-1700 mbara (optional)
	Analyzer Wetted materials 316L Stainless Steel FKM O-Rings Glass
	Power supply 120 or 240 VAC \pm 10%, 50-60 Hz, 300W (18-24 VDC - optional for electronics only) 3 Amps max @ 120 VAC , 1.5 Amps max @ 240 VAC Hz
	Communication Analog Output: Two 4-20mA Isolated, 1200 ohms @ 24 VDC max load Serial: RS232C and Ethernet Protocol: Modbus Gould RTU or Daniel RTU or ASCII Digital Outputs: 5, Concentration Alarm, General Fault, Validation Fail, Validation 1 Active, Validation 2 Active Digital Inputs: 2, Flow Alarm, Validation Request
	Housing materials Electronics: 304 or 316L Stainless Steel Sample System Enclosure: 304 or 316L Stainless Steel
	Hazardous area approvals CSA Class I, Division 2 CSA Class I, Zone 2

CO2	Degree of protection IP66, Type 4X
	测量原理 TDLAS

CO2

Product Headline

An advanced gas analyzer for carbon dioxide (CO2) measurement. The SS2100 uses Tunable Laser Diode Absorption Spectroscopy (TDLAS) to determine the concentration of the analyte without coming into physical contact with the stream.

Channels

1

Analyte and Measurement ranges

CO2 (Carbon Dioxide): 0-10 to 0-1000 ppmv; 0-5000 ppmv to 0-5%

Measured Variables

Concentration
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: 800-1200 mbara or 950-1700 mbara (optional)

Analyzer Wetted materials

316L Stainless Steel
FKM O-Rings
Glass

Power supply

120 or 240 VAC ±10%, 50-60 Hz, 300W
(18-24 VDC - optional for electronics only)
3 Amps max @ 120 VAC , 1.5 Amps max @ 240 VAC Hz

CO2

Communication

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

Serial: RS232C and Ethernet

Protocol: Modbus Gould RTU or Daniel RTU or ASCII

Digital Outputs: 5, Concentration Alarm, General Fault, Validation Fail, Validation 1 Active, Validation 2 Active

Digital Inputs: 2, Flow Alarm, Validation Request

Housing materials

Electronics: 304 or 316L Stainless Steel

Sample System Enclosure: 304 or 316L Stainless Steel

Hazardous area approvals

CSA Class I, Division 2

CSA Class I, Zone 2

Degree of protection

IP66, Type 4X

NH3

測量原理

TDLAS

Product Headline

An advanced gas analyzer for ammonia (NH3) measurement. The SS2100 uses Tunable Laser Diode Absorption Spectroscopy (TDLAS) to determine the concentration of the analyte without coming into physical contact with the stream.

Channels

1

Analyte and Measurement ranges

NH3 (Ammonia): 0-5 ppmv

NH3

Measured Variables

Concentration
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: 800-1200 mbara or 950-1700 mbara (optional)

Analyzer Wetted materials

316L Stainless Steel
FKM O-Rings
Glass

Power supply

120 or 240 VAC ±10%, 50-60 Hz, 300W
(18-24 VDC - optional for electronics only)
3 Amps max @ 120 VAC , 1.5 Amps max @ 240 VAC Hz

Communication

Analog Output: Two 4-20mA Isolated, 1200 ohms @ 24 VDC max load
Serial: RS232C and Ethernet
Protocol: Modbus Gould RTU or Daniel RTU or ASCII
Digital Outputs: 5, Concentration Alarm, General Fault, Validation Fail,
Validation 1 Active, Validation 2 Active
Digital Inputs: 2, Flow Alarm, Validation Request

Housing materials

Electronics: 304 or 316L Stainless Steel
Sample System Enclosure: 304 or 316L Stainless Steel

Hazardous area approvals

CSA Class I, Division 2
CSA Class I, Zone 2

NH3	Degree of protection IP66, Type 4X
C2H2	测量原理 TDLAS
	Product Headline An advanced gas analyzer for acetylene (C2H2) measurement. The SS2100 uses Tunable Laser Diode Absorption Spectroscopy (TDLAS) to determine the concentration of the analyte without coming into physical contact with the stream.
	Channels 1
	Analyte and Measurement ranges C2H2 (Acetylene): 0-5; 0-3000 ppmv
	Measured Variables Concentration 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: 800-1200 mbara or 950-1700 mbara (optional)
	Analyzer Wetted materials 316L Stainless Steel FKM O-Rings Glass

C2H2**Power supply**

120 or 240 VAC \pm 10%, 50-60 Hz, 300W
(18-24 VDC - optional for electronics only)
3 Amps max @ 120 VAC , 1.5 Amps max @ 240 VAC Hz

Communication

Analog Output: Two 4-20mA Isolated, 1200 ohms @ 24 VDC max load
Serial: RS232C and Ethernet
Protocol: Modbus Gould RTU or Daniel RTU or ASCII
Digital Outputs: 5, Concentration Alarm, General Fault, Validation Fail,
Validation 1 Active, Validation 2 Active
Digital Inputs: 2, Flow Alarm, Validation Request

Housing materials

Electronics: 304 or 316L Stainless Steel
Sample System Enclosure: 304 or 316L Stainless Steel

Hazardous area approvals

CSA Class I, Division 2
CSA Class I, Zone 2

Degree of protection

IP66, Type 4X

H2S+H2O**测量原理**

TDLAS

Product Headline

Advanced multi-channel gas analyzer for hydrogen sulfide (H2S) and moisture (H2O), also known as a 2-Pack. The SS2100 uses Tunable Laser Diode Absorption Spectroscopy (TDLAS) to determine the concentration of the analyte without coming into physical contact with the stream.

Channels

2

H2S+H2O**Analyte and Measurement ranges**

H2S (Hydrogen Sulfide): 0-10 to 0-1000 ppmv

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: 800-1200 mbara or 950-1700 mbara (optional)

Analyzer Wetted materials

316L Stainless Steel

FKM O-Rings

Glass

Power supply120 or 240 VAC \pm 10%, 50-60 Hz, 300W

(18-24 VDC - optional for electronics only)

3 Amps max @ 120 VAC , 1.5 Amps max @ 240 VAC Hz

Communication

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

Serial: RS232C and Ethernet (H2S) and RS232C or Ethernet (H2O)

Protocol: Modbus Gould RTU or Daniel RTU or ASCII

Digital Outputs (H2S): 5, Concentration Alarm, General Fault, Validation Fail, Validation 1 Active, Validation 2 Active

Digital Inputs (H2S): 2, Flow Alarm, Validation Request

Digital Outputs (H2O): 2, Concentration Alarm, General Fault

H2S+H2O**Housing materials**

Electronics: 304 or 316L Stainless Steel

Sample System Enclosure: 304 or 316L Stainless Steel

Hazardous area approvals

CSA Class I, Division 2

CSA Class I, Zone 2

Degree of protection

IP66, Type 4X

H2S+CO2**测量原理**

TDLAS

Product Headline

Advanced multi-channel gas analyzer for hydrogen sulfide (H2S) and carbon dioxide (CO2), also known as a 2-Pack. The SS2100 uses Tunable Laser Diode Absorption Spectroscopy (TDLAS) to determine the concentration of the analyte without coming into physical contact with the stream.

Channels

2

Analyte and Measurement ranges

H2S (Hydrogen Sulfide): 0-10 to 0-1000 ppmv

CO2 (Carbon Dioxide): 0-5000 ppmv to 0-5%

Measured Variables

Concentration

Cell Pressure

Cell Temperature

Ambient Temperature range

-20 to 50°C (-4 to 122°F)

Optional: -10 to 60°C (14 to 140°F)

H2S+CO2**Operating Pressure range**

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

Sample Cell: 800-1200 mbara or 950-1700 mbara (optional)

Analyzer Wetted materials

316L Stainless Steel

FKM O-Rings

Glass

Power supply120 or 240 VAC \pm 10%, 50-60 Hz, 300W

(18-24 VDC - optional for electronics only)

3 Amps max @ 120 VAC , 1.5 Amps max @ 240 VAC Hz

Communication

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

Serial: RS232C and Ethernet (H2S) and RS232C or Ethernet (CO2)

Protocol: Modbus Gould RTU or Daniel RTU or ASCII

Digital Outputs (H2S): 5, Concentration Alarm, General Fault, Validation Fail, Validation 1 Active, Validation 2 Active

Digital Inputs (H2S): 2, Flow Alarm, Validation Request

Digital Outputs (CO2): 2, Concentration Alarm, General Fault

Housing materials

Electronics: 304 or 316L Stainless Steel

Sample System Enclosure: 304 or 316L Stainless Steel

Hazardous area approvals

CSA Class I, Division 2

CSA Class I, Zone 2

Degree of protectionIP66, Type 4X

H2S+H2O+CO2**测量原理**TDLAS

H2S+H2O+CO2**Product Headline**

Advanced multi-channel gas analyzer for hydrogen sulfide (H2S), moisture (H2O), and carbon dioxide (CO2), also known as a 3-Pack. The SS2100 uses Tunable Laser Diode Absorption Spectroscopy (TDLAS) to determine the concentration of the analyte without coming into physical contact with the stream.

Channels

3

Analyte and Measurement ranges

H2S (Hydrogen Sulfide): 0-10 to 0-1000 ppmv

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

CO2 (Carbon Dioxide): 0-5000 ppmv to 0-5%

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: 800-1200 mbara or 950-1700 mbara (optional)

Analyzer Wetted materials

316L Stainless Steel

FKM O-Rings

Glass

Power supply

120 or 240 VAC ±10%, 50-60 Hz, 300W

(18-24 VDC - optional for electronics only)

3 Amps max @ 120 VAC , 1.5 Amps max @ 240 VAC Hz

H2S+H2O+CO2**Communication**

Analog Output: Four 4-20mA Isolated, 1200 ohms @ 24 VDC max load
Serial: RS232C and Ethernet (H2S) and RS232C or Ethernet (H2O/CO2)
Protocol: Modbus Gould RTU or Daniel RTU or ASCII
Digital Outputs (H2S): 5, Concentration Alarm, General Fault, Validation Fail, Validation 1 Active, Validation 2 Active
Digital Inputs (H2S): 2, Flow Alarm, Validation Request
Digital Outputs (H2O/CO2): 2, Concentration Alarm, General Fault

Housing materials

Electronics: 304 or 316L Stainless Steel
Sample System Enclosure: 304 or 316L Stainless Steel

Hazardous area approvals

CSA Class I, Division 2
CSA Class I, Zone 2

Degree of protection

IP66, Type 4X

更多信息 www.endress.com.cn/SS2100