

Envent 330S and 331S

H₂S & Total Sulfur Analyzer

The Model 330S/331S H₂S analyzer utilizes field proven tape-based measurement technology that provides a linear and interference-free output of H₂S. An optional Total Sulfur measurement can be added to the analyzer. Certified for Class I, Division 1 Groups B, C and D (330S) and Class I, Division 2, Groups B, C and D (331S).

Features

- Fast Response times Rapid Response Algorithm (RRA) ~ 20 seconds to alarm
- No interference from other components in the sample
- Low power consumption
- Extended tape life of 60 to 90 days
- Measures up to 5 times the calibrated range
- Quick Delivery
- Full field service & training available

Application Flexibility

The model 330S/331S measures H₂S and/or Total Sulfur in natural gas, petrochemical streams, condensate, water, or LPG. Common applications include:

- Sales Gas
- Plant Inlet
- Acid Gas
- Fuel Gas Monitoring
- Bio Gas
- Pipeline Monitoring & Blending
- H₂S Scavenger Systems
- Wellhead Monitoring

User Interface

I.C.E. (Integrated Configuration Environment) is a Windows based program that accompanies all Envent Analyzers for full configurability

- Field friendly interface via front display panel
- Easily configurable alarm processor and calculation processor
- 3 Mb event triggered archive storage
- Alarm/Event log
- Customizable serial RS-232 & RS-485 mapping
- Remote Display (optional)
- Communications including 4 – 20 mA outputs, alarm outputs, solenoid drivers, serial Modbus, and Modbus TCP/IP (optional)

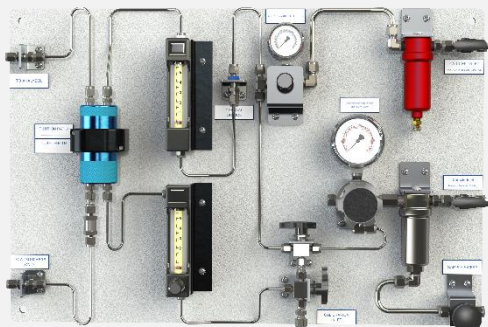


Envent Model 331S H₂S Analyzer



Envent Model 330S with Standard Sample Conditioning and Total Sulfur Oven





Permeable Membrane Dilution System
for Measuring High Range H₂S and
Total Sulfur Samples



Envent Model 330S Analyzer



331S H₂S Analyzer with Standard
Sampling System

Specifications

Analysis Method

Hydrogen Sulfide measured as per ASTM D-4084

Power

12 – 24 VDC @ less than 3 watts or 100 – 240 VAC, 50/60 Hz

Total Sulfur Option Current (Steady State) Maximum: 2.6 A @ 100 – 240 VAC

Electrical Classification

330S: Class I, Division 1 Groups B, C, D

331S: Class I, Division 2 Groups B, C, D

Ambient

0°C to 50°C (32°F to 122°F). Consult factory for other requirements

Output Ranges

Standard Ranges: 0 – 10 ppm, 0 – 20 ppm, 0 – 100 ppm (other ranges available upon request)

Concentration ranges above 0 – 400 ppm require a dilution system

H₂S:

Accuracy

Repeatability

< 1 ppm

1 ppm – 200 ppm

> 200 ppm

Consult Factory

+/- 1.5% F.S.

+/- 2% F.S. [with dilution]

+ 0.5% for 2nd Sensor Measurements [SDS Models*]

TS:

< 1 ppm

2 ppm – 400 ppm

> 400 ppm

Consult Factory

+/- 2% F.S.

+/- 2.5% F.S. [with dilution]

+ 0.5% for 2nd Sensor Measurements [SDS Models]

* Note: SDS Models do not support ppb applications

Inputs

Four digital inputs are individually configurable for pressure switches, temperature switches, or flow switches.

Outputs

2 Analog Outputs

4 Solenoid Drivers

4 Serial Ports

4 Relay Outputs

1 Ethernet Port (Optional)

Display

128 x 64 Graphic Display

Menu is scrolled by internal button or external magnet

Dimensions

330S

17.4"W x 32.7"H x 13.7"

(442W x 831H x 348D mm)

331S

13"W x 15"H x 8"D

(330.2W x 381H x 203.2D mm)

Configuration Software

Windows based software for customer configuration, archive retrieval, and Modbus mapping.

* Product specifications subject to change without notice to improve reliability, function, design or otherwise

Optional Equipment

Ethernet Card

Expansion board to provide TCP Modbus via Ethernet

Total Sulfur

Total sulfur furnace converts all sulfur compounds to H₂S, which allows analyzer to measure Total Sulfur as per ASTM D4468

Stream Switching

Allows switching of up to four (4) input streams or from H₂S to Total Sulfur measurement.

Dilution

Above 10%, please contact Envent to discuss available options

Liquid Sampling

Liquid sample system to measure H₂S in Hydrocarbon liquids or water

Custom Systems

Envent Can design custom integrated systems to meet application requirements

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