

## Envent Model 330S and 331S

### H<sub>2</sub>S & Total Sulfur Analyzer

The Model 330S/331S H<sub>2</sub>S Analyzer utilizes field proven tape-based measurement technology that provides a linear and interference-free output of H<sub>2</sub>S. 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 H<sub>2</sub>S 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
- H<sub>2</sub>S 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 4-20mA outputs, alarm outputs, solenoid drivers, serial Modbus, and Modbus TCP/IP (Optional)

#### Additional Advantages

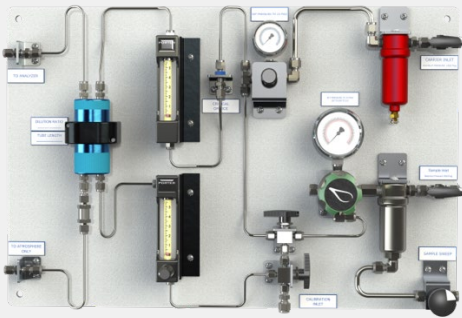
- Customized sample conditioning systems available
- Analytical accessories: Sample Probes, Heated Bundles and Enclosures



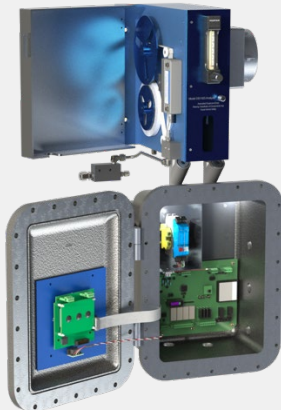
Envent Model 331S H<sub>2</sub>S Analyzer



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



Permeable Membrane Dilution System for Measuring High Range H<sub>2</sub>S and Total Sulfur Samples



Envent Model 330S Analyzer



331S H<sub>2</sub>S Analyzer with Standard Sampling System

## Specifications

<b>Analysis Method</b>	Hydrogen Sulfide measured as per ASTM D-4084	
<b>Power</b>	12–24 VDC @ less than 3 watts or 100-240 VAC, 50/60Hz (300Watts when total sulfur option is included)	
<b>Electrical Classification</b>	330S: Class I, Division 1 Groups B C & D. 331S: Class I, Division 2 Groups B C & D.	
<b>Ambient</b>	0°C to 50°C (32°F to 122°F). Consult the factory for other requirements.	
<b>Output Ranges</b>	Standard Ranges: 0-5ppm to 0-100ppm, higher ranges with dilution available upon request. A dilution system is recommended with ranges over 150ppm. Custom Ranges: ppb levels and >150ppm to 30%	
<b>Response time</b>	20 seconds to alarm.	
<b>Accuracy</b>	+/- 1.5% full scale for ranges 1 to 50 ppm	
<b>Repeatability</b>	+/- 1.5% full scale for ranges 1 to 50 ppm	
<b>Inputs</b>	Four digital inputs individually configurable.	
<b>Outputs</b>	2 Analog Outputs 4 Solenoid Drivers 4 Serial Ports 4 Relay Outputs 1 Ethernet Port (Optional)	
<b>Displays</b>	128 x 64 Graphic Display; Menu is scrolled by internal button or external magnet	
<b>Dimensions</b>	330S 17.4"W x 32.7"H x 13.7"D (44.2 W x 83.1 H x 34.8 D cm)	331S 13"W x 15"H x 8"L (33.02W x 38.1H x 20.32L cm)
<b>Configuration Software</b>	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

<b>SDS Dual Sensor</b>	SDS Analyzers can measure two variables or streams simultaneously.
<b>Total Sulfur</b>	Total Sulfur furnace converts all sulfur compounds to H <sub>2</sub> S, which allows analyzer to measure Total Sulfur as per ASTM D4468.
<b>Auto Calibration</b>	Allows user to initiate a calibration based on time or external switch.
<b>Stream Switching</b>	Allows switching of up to four (4) input streams or from H <sub>2</sub> S to Total Sulfur measurement.
<b>Dilution</b>	Allows measurements up to 30% H <sub>2</sub> S using permeable membrane dilution.
<b>Liquid sampling</b>	Liquid sample system to measure H <sub>2</sub> S in Hydrocarbon liquids or water.
<b>Custom systems</b>	Envent can design custom integrated systems to meet application requirements.

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