

Envent Model 331S

H₂S & Total Sulfur Analyzer

The Model 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 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 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 4-20mA outputs, alarm outputs, solenoid drivers, serial Modbus, and Modbus TCP/IP (Optional)

Additional Advantages

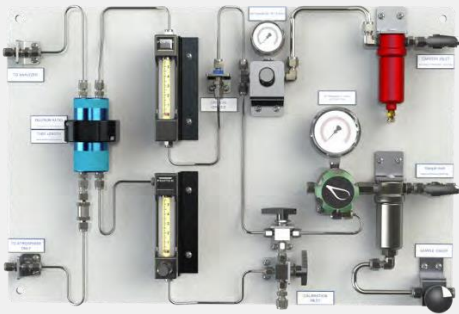
Customized sample conditioning systems available
Analytical accessories: Sample Probes, Heated Bundles and Enclosures



Envent Model 331S H₂S Analyzer



Envent Model 331S with Standard Sample Conditioning and Total Sulfur Oven



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



Envent Model 331S Analyzer with Dilution



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, 50/60Hz (300Watts when total sulfur option is included)
Electrical Classification	331S: Class I, Division 2 Groups B C & D.
Ambient	0°C to 50°C (32°F to 122°F). Consult the factory for other requirements.
Output Ranges	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%
Response time	20 seconds to alarm.
Accuracy	+/- 1.5% full scale for ranges 1 to 50 ppm
Repeatability	+/- 1.5% full scale for ranges 1 to 50 ppm
Inputs	Four digital inputs individually configurable.
Outputs	2 Analog Outputs 4 Solenoid Drivers 4 Serial Ports 4 Relay Outputs 1 Ethernet Port (Optional)
Displays	128 x 64 Graphic Display; Menu is scrolled by internal button or external magnet
Dimensions	331S 13"W x 15"H x 8"L (33.02W x 38.1H x 20.32L cm)
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

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