

Envent Model 331SDS

Dual Sensor H₂S & Total Sulfur Analyzer

The Model 331SDS H₂S Analyzer utilizes field proven tape-based technology that provides a linear and interference-free output of H₂S on two streams simultaneously. An optional Total Sulfur measurement can be added to the analyzer as one of the streams, allowing for simultaneous H₂S and Total Sulfur measurement on a common stream. Certified for Class I, Division 2, Groups C and D (331SDS).

Features & Benefits

- Fast Response times using Rapid Response Algorithm (RRA) 20 seconds to alarm
- No interference from other components in the sample
- Low power consumption less than 3 Watts
- Extended tape life of 60 to 90 days
- Measures up to 5 times the calibrated range
- Fast Delivery
- Full field service & training available

Application Flexibility

The Model 331SDS measures H₂S and/or Total Sulfur in natural gas, petrochemical streams, condensate, liquids, or LPG. Common applications include:

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

User Interface

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

- Field friendly interface via front display panel without need for a laptop
- 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 Ethernet)

Additional Advantages

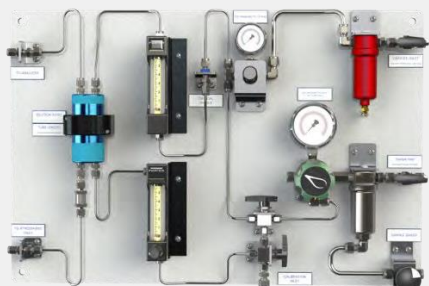
- Customized sample conditioning system
- Analytical accessories: Sample Probes, Heated Bundles and Enclosures



Envent Model 331SDS



331SDS Standard Sample Conditioning System



Permeable Membrane Dilution System for Measuring High Range H₂S Samples



331SDS H₂S and Total Sulfur Analyzer with Auto-Calibration in Stainless Steel Enclosure

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	331SDS 15"W x 15"H x 8"L (38.1Wx38.1Hx20.32Dcm)
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.
H2 Saver Mode	Solenoid utilized Hydrogen saving option to reduce hydrogen consumption by measuring Total Sulfur on a timed basis.