



331SDS (Dual Sensor)

The first dual sensor, interference free
H₂S analyzer

MODEL

331SDS (Dual Sensor) H₂S / Total Sulfur Analyzer

- This unique design utilizes Envent's interference free sensing tape to measure "Two" gas streams concurrently
- Analysis streams can be H₂S/Total Sulfur or High Range / Low Range H₂S

APPLICATIONS

- **Two stream/range simultaneous measurement capability**
- H₂S and Total Sulfur at the same time
- High range inlet and low range outlet H₂S
- Blending applications
- Cost effective real time two stream measurement
- Odorant injection monitoring

FEATURES

- Graphic back-lit LCD Display
- Dual isolated 4-20 ma analog outputs
- Modbus serial communications
- Alarm relays
- Shutdown solenoid output drivers
- Internal archive storage with real time clock
- 60 to 90 day tape life
- No interference from other sulfur compounds
- High resistance to chemical scavengers
- Low maintenance
- Four streams plus calibration

VALUE

The 331SDS is able to measure 2 streams of H₂S in natural gas and other process gases at the same time.

This unique analyzer has dual 4–20 mA outputs, dual measurement alarms, plus trouble and fault alarm relays. The 331SDS displays H₂S concentration in user specified units (ppb, ppm, grams, %, mg/M³) and as well will auto-range to 5 times the lower calibrated range.

The 331SDS is available with a number of sample systems and accessories to handle various applications such as high range H₂S, Total Sulfur or H₂S in liquids.

SENSOR

- Lead acetate technology
- Interference-free
- Linear over a wide measurement range
- Not affected by composition changes
- Resistant to contamination from H₂S scavengers
- Cannot be poisoned by process chemicals
- Provides a physical record of H₂S exposure
- Low maintenance
- Field serviceable

LONGEST TAPE LIFE

Envent Sensing Tape is the strongest in the market, with the longest tape life using an advanced tape algorithm to make complete use of the sensing tape



Model 331SDS
Dual Sensor



Model 331SDS door open

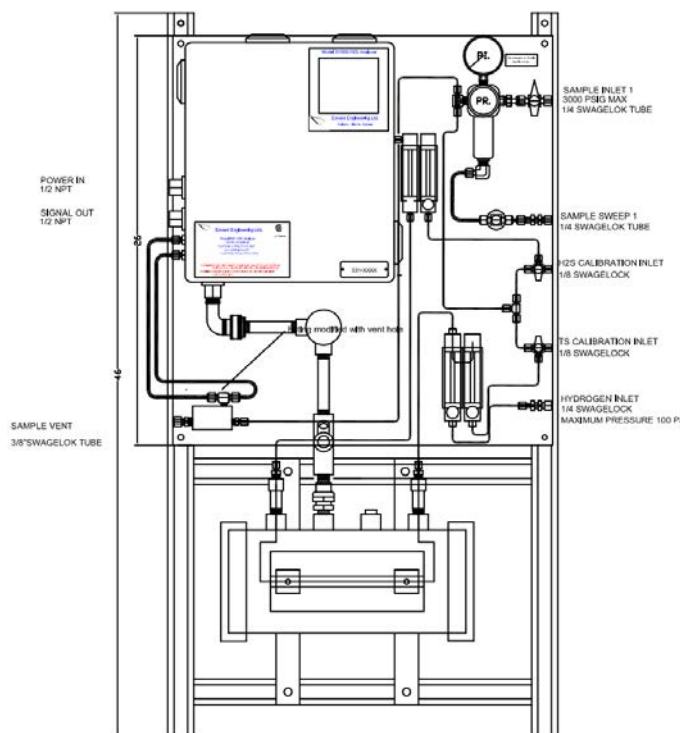


SPECIFICATIONS

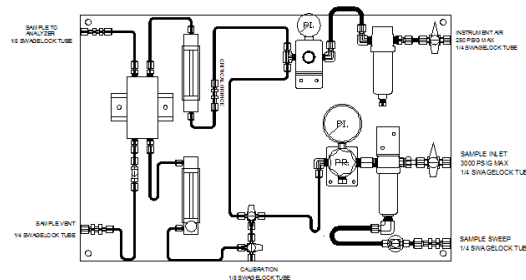
Power	12–24 vdc @ less than 3 watts
	100–240 VAC, 50/60Hz
Electrical Classification	Class 1, Div 2 Grps A, B, C, & D certified to CSA standards
Ambient	0-50 °C (std) consult factory for other requirements
Output Ranges	H2S 0–50 ppb to 0–100 ppm are standard. For higher concentrations, consult factory.
Response time	20-sec to alarm
Accuracy	1.5% full-scale (H2S); 3% (TS and Dilution)
Inputs	24 bit A/D Channel 1, 16 bit A/D Channel 2 Microprocessor-based sensors Low Tape Alarm option Remote calibrate, stream switch, or low pressure alarm
Outputs	Dual isolated 4–20 mA (loop powered) (Modbus) serial RS-232 & RS-485 (Ethernet available) Four 5 amp SPDT alarm relays Four solid state solenoid drivers
Display	128 X 64 Graphic LCD with back lighting

OPTIONAL EQUIPMENT

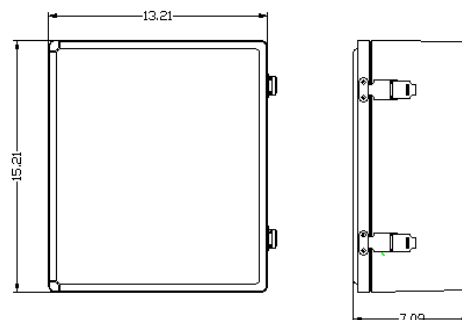
Total Sulfur	Total Sulfur furnace converts all sulfur compounds to H ₂ S which allows analyzer to measure Total Sulfur.
Configuration Software	Window software for customer configuration, archive retrieval, and Modbus mapping
Auto Calibration	Allows user to initiate a calibration based on time or external switch
Stream Switching	Allows switching of four inlet streams or from H ₂ S to Total Sulfur measurement
Dilution	Allows measurements up to 50% H ₂ S using permeable membrane dilution.
Liquid sampling	Liquid sample system to measure H ₂ S in Hydrocarbon liquids and water
Custom systems	Envent can design custom integrated systems to meet application requirements
Dimensions	13"W x 15"H x 8"L (33.02 W x 38.1 H x 20.32 L cm) Standard system and 331DS are mounted on a 24"W x 24"H x 1/4" (60.96 W x 60.96 H x 0.635 L cm) thick anodized panel



Total Sulfur Option



High Range Dilution Option



Dimensions

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