



The Model 4400 In-Stream Hydrogen Sulfide Analyzer is used to continuously verify the H<sub>2</sub>S content of a natural gas sample for the presence of 0-100 ppm levels of Hydrogen Sulfide. This system is used to insure that H<sub>2</sub>S levels in natural gas collection lines remains at acceptable levels to help guard against the corrosive effects of H<sub>2</sub>S on compressors, pipelines and process equipment. It is intended for continuous monitoring prior to the addition of odorants to the gas.

The Sierra Monitor Model 4400 provides the user with a low-cost, easy-to-use solution to effective monitoring of natural gas streams. This system accurately measures H<sub>2</sub>S concentration in the 0-100 ppm range. Fast response of 90% of step change within 30 seconds enables the user to respond quickly to changes in natural gas supply conditions to prevent product contamination.

There is minimal maintenance with the Model 4400 with no tapes to replace, no conditioning solutions, no mechanical stream blenders to calibrate. Calibration is easy with external application of span gas and simple one person adjustments. Calibration and swapping of the gas sensor is a quick and simple operation performed every two weeks.

The 4400-10 receives a low pressure natural gas slip-stream sample. A flow controller in the system delivers a constant flow to the gas sensor and allows for easy calibration and maintenance. An in-line coalescing filter protects the system from sample contaminants.



A 4-20 mA linear signal proportional to sample concentration is provided from the sensor assembly. This signal can interface with a Sierra Monitor Model 4107-99 Transmitter/Display, a single channel controller, the Sentry multi-channel controller or most industry standard controllers or PLCs.

The Model 5100-99-IT-AL Transmitter/Display option can accept the 4-20 mA signal from the Model 4400-10 and provide digital display of the H<sub>2</sub>S concentration, dual concentration alarm contacts, 4-20 mA output and serial MODBUS communication. The Model 5100-99-IT-AL can be mounted directly to the Model 4400 H<sub>2</sub>S Analyzer or at a remote location. The Model 5100-99-IT-AL is mounted in an explosion proof enclosure available in aluminum or stainless steel enclosures.

### Features

- No tapes to replace or conditioning solutions
- Fast response
- Simple one-person adjustments

### Benefits

- Minimal maintenance, no hazardous material to dispose
- Prevention of product contamination
- Easy calibration, minimal service time

# Model 4400 In-Stream Hydrogen Sulfide Analyzer

## Specifications:

### 4400 In-Stream Analyzer

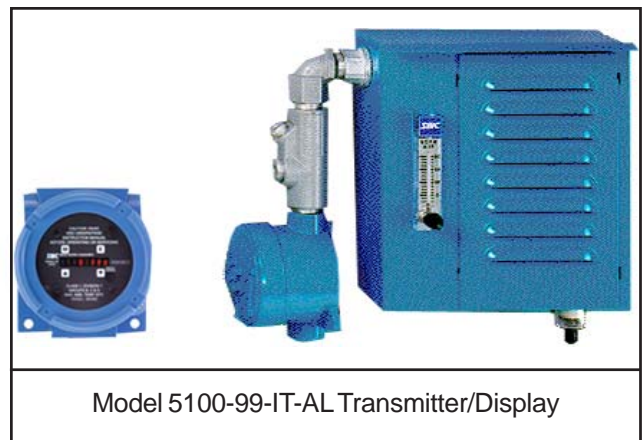
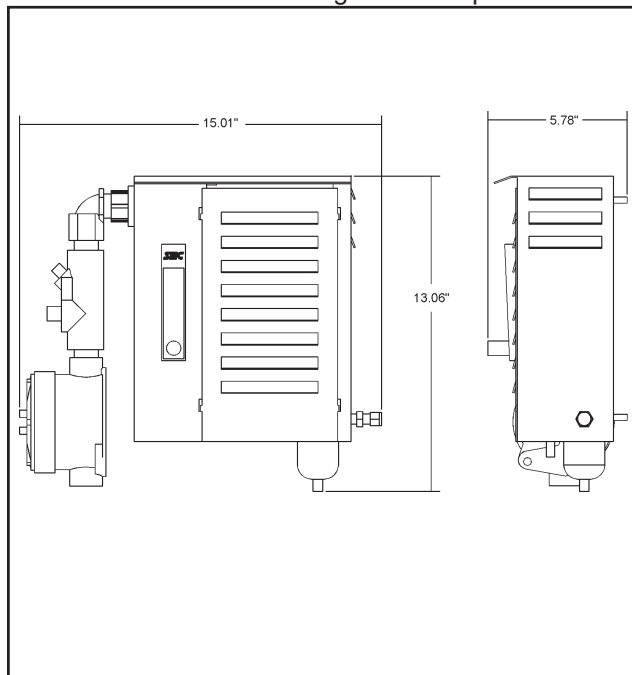
<b>Power:</b>	24VDC
<b>Output:</b>	4-20 mA = 0-100 ppm H <sub>2</sub> S
<b>Environmental:</b>	
Temperature Range	
Operating::	-20 to 50°C (-4 to 122°F)
Storage:	-40 to 50°C (-40 to 122°F)
Humidity:	0-95% RH (non-condensing)
<b>Sensor:</b>	
Range:	0-100 ppm Hydrogen Sulfide
Type:	Electrochemical
Life:	Approximately 1 year in cycled service
Response:	<30 seconds to 90% FS
<b>Mechanical:</b>	
Area Classification:	Div 1, Class 1, Groups B,C,D
Enclosure:	NEMA-1 with removable cover panel
Mounting:	installs on 9" x 7" "H" Frame
Connections:	3 position terminal strip with separate conduit
Dimensions (WxHxD):	9.0 x 11.0 x 4.0 inches (22.9 x 27.9 x 10.2 cm)
Weight:	5 lbs (2.2 Kg)
<b>Warranty:</b>	2 years as non non-consumable items

### 5100-99-IT Transmitter/Display

<b>Power:</b>	24VDC
<b>Operating Temperature Range:</b>	-40 to 50°C (-40 to 122°F)
<b>Display:</b>	Fixed and Scrolling LED
<b>Optional Alarms:</b>	Dual level alarms (8A) plus fault alarm (4A)
<b>Serial Output:</b>	Bi-directional RS-485 MODBUS <sup>®</sup> protocol
<b>Mechanical:</b>	
Housing:	Aluminum: Epoxy-coated, die-cast, copper-fire aluminum Stainless Steel: 316 Stainless Steel
Dimensions( WxHxD):	Aluminum: 6.0 x 4.4 x 4.9 in. 316 Stainless Steel: 5.9 x 4.8 x 4.9 in.
Weight:	Aluminum: 2.7 lbs (1.3 Kg) 316 Stainless Steel: 5.4 lbs (2.6 Kg)

## Ordering Information:

4400-10	In-Stream Hydrogen Sulfide Monitor
5100-99-IT-AL	Single Point Explosion Proof Transmitter/Display - Aluminum
5100-99-IT-SS	Single Point Explosion Proof Transmitter/Display - Stainless Steel



**ISO 9001**  
REGISTERED QUALITY SYSTEM