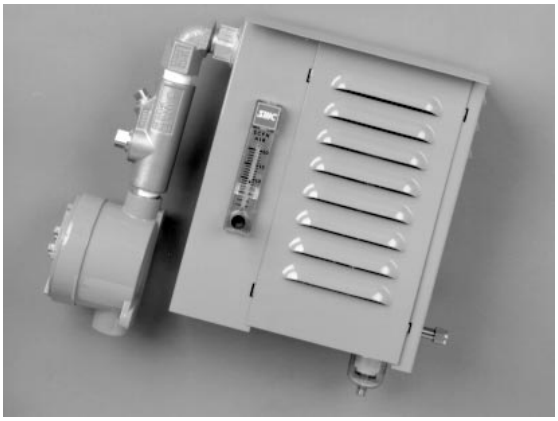
sierra monitor corporation

Model 4400
In-Stream Hydrogen Sulfide Analyzer



The Model 4400 In-Stream Hydrogen Sulfide Analyzer is used to continuously verify the H_2S 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_2S levels in natural gas collection lines remains at acceptable levels to help guard against the corrosive effects of H_2S on compressors, pipelines and process equipment. It is intended for continuous monitoring prior to the addition of odorants to the gas.

The 4400-10 receives a low pressure natural gas slipstream 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 4107-99 Transmitter/Display option can accept the 4-20 mA signal from the Model 4400-10 and provide digital display of the H_2S concentration, dual concentration alarm contacts, 4-20 mA output and serial MODBUS communication. The Model 4107-99 can be mounted directly to the Model 4400 H_2S Analyzer of at a remote location. The Model 4107-99 is in an explosion proof enclosure.

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_2S 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.

Features	**Benefits**
■ No tapes to replace or conditioning solutions	Minimal maintenance, no hazardous material to dispose
■ Fast response	Prevention of product contamination
■ Simple one-person adjustments	Easy calibration, minimal service time

Sierra Monitor Corporation 1991 Tarob Court Milpitas, CA 95035 USA (408) 262-6611 (800) 727-4377 Fax: (408) 262-9042

Model 4400
In-Stream Hydrogen Sulfide Analyzer

Specifications:

4400 In-Stream Analyzer

Power: 24VDC

Output: 4-20 mA = 0-100 ppm H_2S

Environmental:
- 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)

Sensor:
- Range: 0-100 ppm Hydrogen Sulfide
- Type: Electrochemical
- Life: Approximately 1 year in cycled service
- Response: <30 seconds to 90% FS

Mechanical:
- 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)

Warranty: 2 years as non non-consumable items

4107-99 Transmitter/Display

Power: 24VDC

Operating Temperature Range: 14 to 140°C (-10 to 60°F)

Display: 2-line, 32 character alphanumeric backlit LCD

Alarms: Dual level alarms plus fault alarm

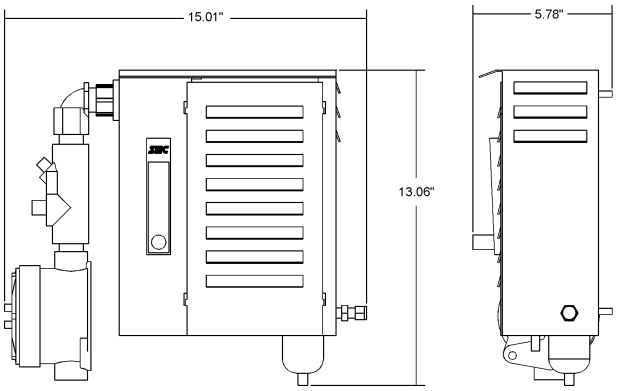
Alarm Contacts: Dry contacts from each alarm rated to switch at least 1 amp @ 30 volts or 0.5 amp @ 125 volts for resistive loads

Serial Output: Bi-directional RS-232 and RS-485 MODBUS® protocol

Mechanical:
- Housing: Explosion proof (NEMA 7/NEMA 4X) (Div. 1, Class 1, Groups B,C,D Class 2, Groups E,F,G)
- Mounting: 3/4" NPT
- Dimensions(WxHxD): 5.3 x 5.7 x 5.7 inches (13.5 x 14.5 x 14.5 cm)
- Weight: 6.0 lbs (3.2 Kg)

Ordering Information:

4400-10	In-Stream Hydrogen Sulfide Monitor
4107-99	Single Point Explosion Proof Transmitter/Display
SPM27064	Maintenance Kit (consists of 1 spare sensor assembly & 2 flow harnesses)



Model 4400-10 with 4107-99 Transmitter/Display

ISO 9001
REGISTERED QUALITY SYSTEM

Sierra Monitor Corporation 1991 Tarob Ct. Milpitas, CA 95035 (408) 262-6611 800-727-4377 FAX: (408) 262-9042
Visit our Web site at: www.sierramonitor.com E-Mail: sierra@sierramonitor.com