



**GENERAL MONITORS**  
Protection for life.

# MODEL 2280A

## Four-Channel H<sub>2</sub>S Gas Monitor



### Features

- Continuous diffusion, solid-state sensor
- High visibility LED status indicators
- Adjustment-free calibration
- Low power consumption
- Wide variety of relay options
- Two year warranty

### Benefits

- Stable operation over wide ambient temperature and humidity ranges
- Provides visual indication of fault and alarm status at the detector location
- Lower calibration costs
- Lower operating costs
- Provides choice to meet specific customer requirements
- User protection

### Description

The Model 2280A is a four-channel system specifically designed for continuous monitoring of Hydrogen Sulfide (H<sub>2</sub>S) gas in the ppm (parts-per-million) range. The 2280A controller is a microprocessor-based instrument, which features recent advancements in electronic circuitry and packaging techniques.

The system consists of four remote sensing assemblies and a solid-state controller. The controller consists of four independent channels, each having its own control circuitry. The sensors are monitored independently (i.e. they are not scanned, nor are the signals summed).

User interfaces are provided so that the operator may interpret and direct the Model 2280A in the performance of its various functions. User interfaces consist of a digital display, status indicators, a mode button and a reset button. The digital display provides the user with the gas concentration at the sensor site, fault diagnostic codes, calibration prompts and setup parameters.

The controller should be mounted in a weather protected non-hazardous area. Several GMI accessories are available for panel, wall or 19-inch rack installation. For hazardous areas an explosion proof housing is available for Class I, Division 1, Groups C and D.

### Applications

- Compressor Stations
- Drilling Platforms and Rigs
- Fuel Loading Facilities
- Gas and Oil Production Platforms
- Gas Turbines
- LNG Processing and Storage
- Oil Well Logging
- Solvent Vapors
- Wastewater Treatment Plants



# MODEL 2280A

## System Specifications

**Digital Readout:** 0-20, 0-50, 0-99 ppm

**Accuracy:** ±2 ppm or 10% of applied gas, whichever is greater

**Electrical Classification:** General purpose for mounting in non-hazardous areas, indoors.

**Warranty:** Two years

**Approvals:** CSA

## Environmental Specifications

**Temperature Range:** 32°F to 140°F (0°C to 60°C)

**Storage Temperature:** -4°F to 149°F (-20°C to 65°C)

**Humidity:** 15-95%, non-condensing

## Mechanical Specifications

**Mounting:** Panel or wall

**Dimensions:** 4.0" W x 6.9" H x 11.5" D (102mmW x 175mmH x 292mmD)

**Weight:** 6.2 lbs. (2.86 kg)

## Electrical Specifications

**Power:** 105-130 VAC (205-255 VAC optional), 50-60 Hz, 22-30 VDC, 9 watts nominal per channel (117 VAC)

**Output:** Analog 4-20mA (300 ohm load max.) Accuracy ±5%, 1.5-20mA

**Alarm Circuits:** 4A/117 VAC, resistive

**Status Indicators:** AO - Analog output malfunction  
SE - Sensor malfunction  
HI - High line voltage  
LO - Low line voltage

**Standard Configuration:** 2280A-1-1-1-01-1-4 (110 VAC / 24 VDC, common relays/alarms, latch alarm, non-latch warn, de-energized, 100 ppm standard sensor, 99 ppm meter scale, 4-active channels)

## Sensor Specifications

**Type:** Continuous diffusion, adsorption type

**Temperature Range:**  
Standard Sensor: -65°F to +167°F (-55°C to +75°C)  
High Temperature Sensor to +195°F (90°C)  
FM Approved: -40°F to +140°F (-40°C to +60°C)

**Response Time:** T<sub>50</sub> < 1 minute with full-scale gas applied (screen)  
T<sub>50</sub> < 2 minutes with full-scale gas applied (sintered)

**Zero Drift:** Less than 5% per year

**Repeatability:** ±2 ppm or 10% of reading, whichever is greater

**Life:** 3 to 5 years, normal service

**Electrical Classification:** FM and CSA, Class I, Division 1, Groups B, C and D; ATEX and GOST, Ex ds IIC T6

**Specificity:** H<sub>2</sub>S specific

**Warranty:** Two years

**Cable Length:** Four conductor cable. Maximum length of cable between controller and sensor assembly with loop resistance of 20 ohms  
NOTE: Shielded cable is recommended

Wire Size AWG	Length	
	(Meters)	(Feet)
14	1,029	3,375
16	686	2,250
18	411	1,350
20	274	900

Specifications subject to change without notice.

Represented by:

## General Monitors Worldwide



[www.generalmonitors.com](http://www.generalmonitors.com)

### Lake Forest, CA

26776 Simpatica Circle  
Lake Forest, California, 92630  
Tel: +1-949-581-4464  
Fax: +1-949-581-1151  
email: [info@generalmonitors.com](mailto:info@generalmonitors.com)

### Houston, TX

9776 Whithorn Drive  
Houston, Texas, 77095  
Tel: +1-281-855-6000  
Fax: +1-281-855-3290  
email: [gmmhou@generalmonitors.com](mailto:gmmhou@generalmonitors.com)

### Ireland

Ballybrit Business Park  
Galway  
Republic of Ireland  
Tel: +353-91-751175  
Fax: +353-91-751317  
email: [info@gmil.ie](mailto:info@gmil.ie)

### Singapore

No. 2 Kallang Pudding Road  
#09-16 Mactech Building  
Singapore 349307  
Tel: +65-6748-3488  
Fax: +65-6748-1911  
email: [genmon@gmpacifica.com.sg](mailto:genmon@gmpacifica.com.sg)

### United Arab Emirates

P.O. Box 61209  
Jebel Ali  
Dubai  
United Arab Emirates  
Tel: +971-4-8815751  
Fax: +971-4-8817927  
email: [gmmme@emirates.net.ae](mailto:gmmme@emirates.net.ae)

### United Kingdom

Heather Close  
Lyme Green Business Park  
Macclesfield, Cheshire  
United Kingdom, SK11 0LR  
Tel: +44-1625-619583  
Fax: +44-1625-619098  
email: [info@generalmonitors.co.uk](mailto:info@generalmonitors.co.uk)