

Galvanic's 903 H₂S Analyser is an online instrument designed to measure hydrogen sulphide (H₂S) and / or total sulphur in gaseous streams. A single analyser can be configured to monitor up to four (4) streams. The instrument's advanced digital colorimetric sensor measures the rate of darkening caused by the reaction of H₂S on white tape impregnated with lead acetate in accordance with ASTM methods D4084-94, D4323-97 and D4468-95.

Performance

Range	0-2000 ppm w/out dilution (consult factory) 0-100% w/ dilution
Low Range	0-1 ppm or less (consult factory)
Linearity	±1% of full scale
Repeatability	±1% of full scale >1ppm ±2.5% of full scale <1ppm ±2.5% of full scale >200ppm ±2% of full scale for total sulphur
Response Time	< 20 sec to alarm; 3 min to 90%
Cycle Time	Depends on range and gas concentration. Cycle time is user configurable; typical is 3 mins.

Functions

Streams	One (1) stream (standard), with up to 4 streams (optional). Each stream includes: H ₂ S analysis run, zero run, reference1 run, reference2 run, calibration run and total sulphur run (optional).
Multi-Range	Each stream can have separate calibration coefficient and range of measurement. Please consult factory for details.
Tape Life	5-14 weeks, depending on application. Typical tape life given 3 minute cycle time is 5 weeks. Can be extended to as much 3 months at low concentration.
Auto/Manual Mode	AUTO mode: analyser runs in predefined sequence. MANUAL mode: user can force any stream to run.

Communications / Interface

Outputs	6 - 4-20mA outputs (isolated and scaled to range) 3 - SPDT alarm relays 5 amps @ 30 VDC or 8amps @ 120/240 VAC (up to 3 more optional) 1 - 3 amp max 35 VDC or 3A 24-280 VAC Solenoid Driver (standard), up to 7 more (optional) 1 - USB port 1 - RS-232 Serial Port 1 - RS-485 isolated serial Port 1 - LAN Port for extended analog outputs 1 - Ethernet (optional) Modbus communication on all ports
Inputs	8 discrete inputs (4 - Dry contact digital inputs & 4 - wet contact digital inputs (12/24 VDC) 2 - 4-20 mA, user selected

Operator Interface	128x64 LCD Screen Handheld Keypad (Intrinsically safe keypad for D1 models) 10 visual indicators (LED) for quick status Remote PC GUI
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Instrument Specifications

Size	28"Hx16"Wx16"D
Weight	Class 1, Div 2 version: 40 lbs Class 1, Div 1 version: 80 lbs
Power Consumption	10W @ 24VDC 250W @ 120 AC (Total sulphur option)
Power Input	Dual power design - Universal 90-240VAC and 10-36VDC input. Capable of being attached to redundant power supply.
Electrical	CSA C/US Certified
Classifications	Class 1, Div 1, Group B,C&D Class 1, Div 2, Group B,C&D
Ambient Temp.	10-50°C (without enclosure)
Electronics	- Dual processor design with intelligent colorimetric sensor. To achieve greatest sensitivity sensor uses 24 bit AD converter equipped with temperature monitor on sensor block. Sensor automatically calibrates on every cycle to prevent drift. - Optical tape counter optimizes tape usage and provides exact measurement of tape used. User can program low tape alerts / alarms. - Real time clock for accurate event time stamping.
Software	Windows based software for configuration and monitoring. Software includes advanced configurable features for stream switching, automatic calibration, multi mode H ₂ S and total sulphur measurement, reference and zero gas test, and multi-ranging.
Humidifier	Permeable membrane humidifier system facilitates faster response time and eliminates moisture carry-over to lead acetate tape.
Memory	Field programmable memory. Firmware for unit can be upgraded in the field.
Data Logging	Up to 10 months of H ₂ S concentration data logs. 512 Kbytes non-volatile memory for data logging and audit trail.

Options

Total sulphur system, dilution system, high pressure sampling system, solar power, back panel, low pressure sensor, low hydrogen sensor, auto-cal, and enclosure / cabinets (temperature controlled enclosure)

ISO 9001:2000



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