

GPR-7500 AIS/IS

ATEX Online H₂S Analyzers



The GPR-7500 IS transmitter and GPR-7500 AIS analyzer measure hydrogen sulfide ppm in gas streams. Both units are ATEX certified for use in hazardous areas.

The analyzer (AIS version) offers barometric pressure compensation, alarm relays and Modbus RTU communication.

Highlights

- 4-20 mA output as standard
- 2 x field selectable concentration alarms (AIS only)
- Modbus communication (AIS only)
- Standard sample includes sample/span valve, moisture filter, flow meters
- Optional sample system
- 12 to 28 V DC power or ATEX certified mains power
- Typical sensor life 24 months

Application

- Measurement of trace H₂S in natural gas

Technical Specifications

Accuracy	<2% of full scale range under constant conditions	
Analysis ranges	0-20, 0-50, 0-100 ppm full scale ranges; auto-ranging or manually lock on single range	
Approvals	Certified for use in hazardous areas* UL: United States: UL 1203, UL 913, UL 508 Canada: CAN/CSA C22.2 No. 30-M1986, CAN/CSA C22.2 No. 157-92, CAN/CSA C22.2 No. 14-10 ATEX: Directive 94/9/EC	
Area classification	ATEX Certified: EX II 2 G Ex d [ib] ib IIB T4 T _{amb} -20 to +50°C	
Alarms	Two user configurable concentration alarm relays rated 3 A @ 100 V AC; field programmable alarm time delays; alarm bypass for calibration (AIS only)	
Calibration	Span gas 50 to 100 ppm H ₂ S balance air	
Compensation	Barometric pressure (AIS standard)	
Connections	1/4" min; 3/8" if vent line >3m	
Controls	Water resistant keypad; menu driven range selection, calibration and system functions	
Display	Graphical LCD 70 x 35mm; resolution 0.1 ppm; displays real time ambient temperature and pressure	
Enclosure	NEMA Type 3R for rain in outdoor applications	
Flow	Maintain constant flow, 0.2 NI/min recommended	
Linearity	±1% of full scale	
Pressure	Inlet	Regulate to 0.3 to 2 barg to deliver constant 0.2 NI/min flow
	Vent	Atmospheric
Power	12 to 28 V DC 110 to 220 V AC (AIS only)	
Response time	90% of final reading in 90 seconds	
Sample system	Coalescing filter, flow meters, sample/span valve; Note: Sensor requires 2 to 3 hours exposure to air to recover from exposure to moisture.	
Sensitivity	<0.5% of full scale range	
Sensor model	OSV-72-BH (standard ranges)	
Sensor life	24 months @ +25°C and 1 atmosphere	
Signal output	4-20 mA Modbus RTU communication (AIS only)	
Operating range	-10 to +45°C	
Warranty	12 months analyzer; 12 months sensor	
Wetted parts	Stainless steel	
Optional Equipment		
Sample conditioning systems - contact Michell Instruments		
OSV-72-BE sensor for 0-500 ppm, 0-1000, 0-2000 ppm full scale ranges		

*See certification box

ATEX Certified - Directive 94/9/EC
Examination Cert: INERIS 10ATEX0020



II 2 G
Ex ib IIB T4
T_{amb} -20°C to +50°C



0080

Issue No: GPR-7500&7100_V1_UK_1112

GPR-7100 Portable

Rechargeable Battery Powered H₂S Analyzer

Technical Specifications



The GPR-7100 portable H₂S analyzer measures hydrogen sulfide, with 3 ranges available. This unit has ATEX certification pending for use in hazardous areas.

The analyzer offers flexibility to sample gases from multiple points. It is supplied with coalescing filter, flow meters and an integral sample pump.

Highlights

- Sensitivity 0.5% full scale
- 3 ranges standard
- Auto ranging or single fixed
- Integral sample pump
- 0 to 1 V signal output
- Operable during recharging (safe area only)

Application

- Measurement of trace H₂S in natural gas

Accuracy	<2% of full scale range under constant conditions	
Analysis ranges	0-20, 0-50, 0-100 ppm full scale ranges; Auto-ranging or manually lock on single range	
Approvals	None; UL and ATEX certifications pending	
Calibration	Span gas 50-100 ppm H ₂ S balance air	
Compensation	Barometric pressure, temperature not required	
Connections	1/8" compression tube fittings	
Controls	Water resistant keypad; menu driven range selection, calibration and system functions	
Display	Graphical LCD 0.8 x 0.4"; resolution .1 ppm; displays real time ambient temperature and pressure	
Enclosure	Painted aluminium NEMA 4X, 1.2 x 2.7 x 0.9m, 3.6kg	
Flow	Maintain constant flow; 0.2 NI/min recommended	
LED Indicators	Low battery (72 hour warning); charge mode	
Linearity	±1% of full scale range	
Pressure	Inlet	Regulate to 0.3 to 2 barg to deliver constant 0.2 NI/min flow
	Vent	Atmospheric
Power	Rechargeable battery, 60 day duty cycle	
Response time	90% of final full scale reading in 90 seconds	
Sample system	Coalescing filter, flow meters and integral sample pump	
Sensitivity	<0.5% of full scale range	
Sensor model	OSV-72-BH (standard ranges)	
Sensor life	24 months @ +25°C and 1 atmosphere	
Signal output	0 to 1 V	
Operating range	-10 to +45°C	
Warranty	12 months analyzer; 12 months sensor	
Wetted parts	Stainless steel	
Optional Equipment		
Sample conditioning systems - contact Michell Instruments		
Ranges: 0-500, 0-1000, 0-2000 ppm Full Scale ranges (OSV-72-BE sensor)		