

OdaLog

Low Range H₂S Logger 0.01 to 2.00ppm



*For odour complaint monitoring,
short term scrubber performance
testing, odour surveys and
environmental odour management*

Development of the OdaLog Low Range H₂S Logger 0.01-2.00ppm

Hydrogen Sulphide can be smelled at very low ppb levels of H₂S and has a strong, offensive and nuisance odour. This odour can be the source of numerous complaints from residential and business communities and in many areas, H₂S levels are regulated to ensure emissions are within acceptable levels. For this reason, the OdaLog Low Range H₂S Logger was developed. With a measurement range of 0.01-2.00ppm and long term logging capability, it is one of the most accurate and effective H₂S odour management tools available.

Using the OdaLog Low Range H₂S Logger

The Low Range H₂S Logger is designed for indoor and outdoor use and will record levels of H₂S at a sampling interval between 10 minutes and 1 hour for at least one week on a single C-size alkaline cell. This allows operators to deploy the Low Range Logger ahead of time at the site of a problem or facility perimeter so that odour problems can be measured and recorded as they occur. The Low Range H₂S Logger has an in-built sample pump and can log up to 30,000 data points.

When monitoring is complete, collected data can be downloaded to a PC, laptop, or pocket PC and analysed using the OdaStat software. A logging survey mode has been provided to "sniff" out low level odour sources once a problem has been identified.

Typical Applications

- Plant perimeters
- Fence line monitoring
- Short term scrubber performance testing
- Corrosion control in equipment rooms
- Odour and corrosion studies
- Low level H₂S source detection

Case Study: OdaLog Low Range H₂S Logger

A council receives numerous odour complaints from the same resident who lives adjacent to a sewage pumping station and an industrial estate. A council officer uses the Low Range Logger in 'Survey Mode' to instantly detect any high readings of H₂S at the resident's premises. Detecting no H₂S levels, the officer switches the instrument to 'Log Mode' then positions the Low Range Logger at the perimeter of the sewage pumping station. The Low Range Logger remains in this location for 7 days, recording any levels of H₂S that may be detected. At the end of this period, the log file shows that no H₂S was recorded and the trial is repeated for a second week. During this period, a complaint is received from the resident although no H₂S has been logged. The investigation is then extended to the industrial estate where the Low Range Logger is placed on its perimeter. During this trial, levels of H₂S are detected and recorded by the Low Range Logger indicating that the source of the odour is the industrial estate, rather than the sewage pumping station. The Low Range Logger is then placed in 'Survey Mode' and used to pinpoint the source of the H₂S, enabling appropriate odour management techniques to be effectively applied.

Specifications	
Measurement Range	0.01 to 2.00ppm H ₂ S
Zero Drift (NTP)	±0.01ppm Conditions: NTP, fresh air, taken over 10 consecutive sample cycles
Precision	5% Relative Standard Deviation Conditions: NTP, 0.20ppm H ₂ S applied, taken over 10 consecutive sample cycles.
Accuracy	±10% of reading 0.10ppm to 2.00ppm Conditions: NTP, calibrated at 0.50ppm
Linearity	Tested over the range 0.00ppm to 1.00ppm ±9%TG at 0.25ppm, ±6%TG at 0.75ppm Conditions: NTP, calibrated at 0.50ppm, tolerances as defined by NATA
Sample Flow Rate	Evaluation Phase Sample Flow Rate – 100 to 150ccm. Total accuracy not maintained at flow rates below 100ccm.
Environmental Protection	IP54 (dust and splash protected) Uses OdaLog® double O-ring sealing technology
Instrument Temperature Range	0° C to 40° C and 6° C change / Hr maximum (32° F to 104° F and 11° F change / Hr maximum)
Logging / sampling interval	10 minutes to 1 hour
Memory capacity	30000 data points
Relative Humidity Range	15-90% (non-condensing)
Pressure Range	Atmospheric ±10%
External Dimensions	62mm (2.44") diameter X 307mm (12.1") long
Weight	Approximately 900grams (2.0lb)
Battery life (and type)	CPU battery: 2 Months (2/3AA size Lithium cell) Pump battery: 7 Days (C size Alkaline cell)
Warranty	12 Months

The OdaLog Low Range H₂S Logger fully complies with immunity and emission requirements for EMC.

Ordering Information

Item	Part Number
OdaLog Low Range H ₂ S Logger 0.01-2.00ppm (standard package includes instrument, 25-0014 pushing tool, User Manual, 11-0000 Allen tool with Magnetic base, 11-0001 Calibration adaptor, 12-0001 O-ring grease, 02-0003 2/3 AA spare CPU battery, 22-0002 clear plastic switch cover)	OL50
Software – OdaStat Software Kit (includes OdaStat CD, IR link and serial cable, stand for IR link, and OdaStat Quick User Guide)	11-0042
Software – Pocket OdaStat (for use with pocket PCs for downloading of OdaLog Logger data in the field)	40-0008
Weather shield (required for outdoor use) (stainless steel cover for protection of Low Range H ₂ S Logger for outdoor applications)	25-0013

Authorised Distributor

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