

AnOd: Odorant Analyzer



Our priorities

- Performance
- Reliability
- Flexibility
- Convenience
- Cost-efficiency

Support & Service:

BACS provides various ways of warranty and support programs including factory & end-user side training, phone & web assistance and customizable solutions for wide range of applications.

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AnOd is a series of **odorant analyzers** designed for fast, reliable and accurate measurement of the total concentration of mercaptans separated from hydrogen sulfide in gas phases including **natural gas**.

Modifications of odorant Analyzers

- ✓ **AnOd** – stationary process odorant analyzer
- ✓ **AnOd Transmitter**



Main Features

- ✓ Electrochemical sensor with high sensitivity
- ✓ Fast analysis time
- ✓ No auxiliary gas is needed
- ✓ No interferences with other components of natural gas
- ✓ Superior accuracy
- ✓ Simple design, easy installation and operation
- ✓ Explosion protection for all modifications
- ✓ Automatic calibration

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Importance of measuring mercaptans in natural gas

On-line control of odorization process allows to keep required intensity of gas smell and significantly improves safety of natural gas usage.

Also it provides more rational consumption of odorant because it helps to consider the initial concentration of mercaptans before odorization and the losses of odorant during gas transportation through pipelines



AnOd



AnOd - simple and reliable solution for odorant level measuring in gases

The intensity of smell is calculated proportionally to amount of detected mercaptans according to national standards of the client

Benefits

- ✓ Separating hydrogen sulfide by chromatography followed by total mercaptans analysis
- ✓ Automatic calibration with internal permeation tube
- ✓ No sample conditioning system is required
- ✓ Internal data storage and variety of output interfaces
- ✓ Integrated software and power supply unit
- ✓ Wide operation ambient temperature range
- ✓ No heated cabinet required
- ✓ Easy maintenance with low service cost

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AnOd Transmitter



AnOd Transmitter is created for on-line mercaptans analyzes with the same performance capabilities as stationary **AnOd** version.

Benefits

- ✓ Automated operation
- ✓ No need for PC, all operations are being executed by integrated microcomputer
- ✓ Data could be transmitted
- ✓ Comfort mounting. The unit is compact and light, easily installed on the pipe close to odorization unit.
- ✓ No need for additional heating or block-box.
- ✓ Separating hydrogen sulfide by filter.
- ✓ Low life cost. The unit doesn't require regular technical maintenance, no need for additional gas supply, low power consumption.



Technical characteristics

Option	AnOd	AnOd Transmitter
Principle of operation	Electrochemical	
Number of analyzed streams	1	1
Operation mode	Automatic	Automatic
Explosion protection	1 Ex d IIC T6 Gb	
Ingress protection	IP 66	IP65
Power supply	220 V, 50 Hz	24 V
Power consumption	up to 90 W (start-up) up to 30 W (typical)	up to 15 W
Start-up time, min	up to 60	up to 30
Interfaces	RS232/RS485, Ethernet, 4-20 mA, GSM / GPRS	RS485, 4-20 mA, discrete outputs
Analysis cycle	Periodic, 5 min	
Calibration	Automatic by built-in permeation tube	Automatic by test gas mixture
Sample gas pressure, MPa	0,2-1,2	0,05-0,1
Sample gas flow rate, ml/min	50-200	
Software	Built-in and external	Built-in
Ambient temperature, °C	from +5 (-40*) to +50	from +5 to +50
Weight, no more than, kg	39	8
Dimensions, mm (L×W×H)	450 x 238 x 485	350 x 196 x 284

* Optional. Heated gas inlet required.

Metrological characteristics

Principle of operation	Electrochemical
Detection range, mg/m ³	0-100 for mercaptans
Display range, mg/m ³	0-50 for mercaptan sulfur
Maximum relative uncertainty, %	
For range 0-10 mg/m ³	± 20 of full scale
For range 10-100 mg/m ³	± 20 relative
Analysis cycle	from 5 min.

Custom solutions

We are able to design a custom analytical solution for your specific application. For more information please don't hesitate to contact us.

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