

## **IMS-ODOR**



On-line Monitoring Device for the precise

Quantification of Gasodor<sup>®</sup> S-Free<sup>®</sup> in Natural Gas



## **IMS-ODOR**

Stationary device to on-line monitor Gasodor® S-Free® in Natural Gas

The IMS-ODOR is an independent and fully automatic working measurement device, which has particularly been developed to precisely quantify and transmit the concentration of Gasodor®-S-Free® in natural gas. Requested intervalls of measurements can individually be set. Before each measurement the system carries out a self-calibration by the use of a certified calibration gas to achieve and secure maximum preciseness of the odorant concentration. The acquired data are transmitted via current loop of 0 or 4-20mA, a modem- or network connection to a control room. The instrument can further be operated through a remote control (on demand through G.A.S.). Beyond that up to 15,000 measurement values can be stored on the integrated compact flash card and be downloaded via USB (stick or cable connection). The 6,4" TFT colour display allows to visualize all data on-site and carry out measurements manually as well. On demand the IMS-ODOR can be equipped with touchpad and/or further additional sensors.

## **Technical Data**

Enclosure: 19"-compatible, protection category IP20, EMC

Dimensions: W x D x H: 449mm x 375mm x 177mm

Weight: 15,5 kg

Power: External: 100-240 V / 50-60 Hz, selectable

Internal: 24V DC

**Display:** 6,4" TFT-display

Steering: Angular momentum sensor

Interfaces: Modem, USB, ethernet, 0 or 4-20mA, relay for alarm

Processor: 400MHz x-scale

Data Storage: 1 GB compact-flash

Data Transmission: ultra-fast ADIO-board

Cooling Baseboard/Processor: Ventilator 24V, max. 5,5m³/h

Electrical Connections: 2x Sub-D 9-pin, 1x Sub-D 15-pin, 1x

RJ45, 1x USB-A, 1x net connection

Gas Connections: 6 mm Swagelock for in- and outlets

(calibration gas, air, flare and outlet)

Working Principle: Ion Mobility Spectrometry (IMS)

**Ionisation:** Radioactive Beta-ionisation (<sup>63</sup>Ni <100MBq)

Range: 4-23 mg/m<sup>3</sup> Gasodor<sup>®</sup> S-Free<sup>®</sup> in natural gas (adjustable

according to customer request)

Precision: ± 2 mg/m<sup>3</sup>

Calibration Gas: Gasodor® S-Free® in natural gas (acc. to

chemical characteristica of natural gas type)

Automatic Mass Flow Control: CH<sub>4</sub>, 6-200ml/min., 25-500mbar

Moisture Sensor: 0 to 100% rh, tolerance: +/- 1,8% rh

Flame Detector: Resistance thermometer 100mm

Range: -50 to 600°C

Gas Pressure Sensor: 0-650 mbar relative, analog

Temperature Sensor: -40 to 120°C, tolerance: +/- 0,3°C

Barometric Sensor: 800 to 1,100 mbar absolute, digital

Gas Flow Sensors: 0 to 200ml/min, 0 - 6V