

EXPERT IN **GAS ANALYSIS**

GAS ANALYZER GC 866

VigiEnose*

Online analysis and monitoring of odorous compounds Sulfur & VOC monitoring



Model: V10

On-line applications:

Fence line Odor control monitoring Deodorisation process Fugitive emission Process control / CIP

Targetted compounds:

Standard version: H2S / SO2 / MM / EM / DMS / DMDS / DES / IPM / Total VOC Upon request: TBM / NPM / 2BM / IBM / NBM / THT

Main markets:

WWTP / Refineries / Petrochemicals / Gas process sites / Rendering plaints Ambiant / Industrial air monitoring Odor impact management

Standards:

ISO 19739:2004, DIN 51855/7 ASTM D 7493-08 Correlation with EN13 725 / ASTM 679-E04

Odor Unit (OUE/m³)

tVOC H,5

Mercaptans

Sulfides

* Analytical solution for vigiODOR platform

Chromatotec® is specialized in VOC, Sulfur and permanent gases analysis at trace and ultra trace levels (%, ppm, ppb, ppt). Please visit our website for more details.

Updated: February 2016

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Description:

The VigiEnose is the first analyzer able to track VOC & Sulfurs at ppb/ppt levels. It is more sensitive than human nose. It is an auto GC (gas chromatograph based) with specific detector for sulfurs and VOC.

Principle:

- · Automatic sampling using a loop
- · Loop injection by automatic valve on the column
- · Isothermal gas chromatograph
- Detection of all compounds eluting from the column performed by Chromatotec's wet cell sulfur specific detector
- Signal provided by electrochemical reaction between the wet cell electrolyte and the sulfur compounds and by a PID dedicated for total VOC measurement.

Key points:

- Automatic calibration/validation of the data, with embedde permeation tube for lusfurs
- · Continuous monitoring with automatic online sampling
- · Analytical performances:
 - · Specific and very sensitive to sulfur compounds
 - · Results validation by automatic standard injection
 - · Long term stability using detector installed in reservoir
- · Extremely low maintenance
 - · Very long life time detector, up to 10 years
 - · Low gas consumption, can be reduced in option
 - · More than 10 years data storage
 - No cylinders required thanks to internal calibration tube and gas generators
- · Automatic control with process device
- · Intelligents system with tunable and interactive alarm levels
- · PID detector in addition to specific wet cell detector
- Powerful VISTACHROM Chromatotec® software:
 - · Remote monitoring & injection control
 - Full traceability with on board archiving of results and chromatograms
 - QC Set up and control of threshold alarms
 - Data export by MODBUS / 4-20 mA / 0-10 V
 - · Time stamp results

Options:

- Multiple stream selector (up to 16 streams with one analyser)
- · Portable olfactometer or lab olfactometer (EN 13725)
- Modeling software with weather station for live odor/chemical impact
- Complaints management with platform for automatic integration of perception of neighborhood
- Explosion proof Exp box
 - ATEX Zone 2: Ex II 3G Ex pz IIC T4
 - CSA international Class 1 Div 2, group B,C & D
- Calculation modules (Average / Statistics / Odor index and more)
- Automatic data transfert through: Module for 4 outputs 4-20mA / Modbus / MGS1
- Nitrogen or air generator
- 24 V DC power supply
- · Electric selection valve to reduce air consumption
- Wall mounted box

Technical Specifications:

<u>Total VOC with PID detector</u> <u>Reduced sulfur compounds analysis:</u>

 Speciation and/or Total Reduced Sulfur: sum (TRS) and H2S, SO2, DMS, MM, EM compounds

Detection limits*:

- · ppb for chemical
- 50 UO E/m³ (limit of the olfactometer)
- *more sensitive analyzers available upon request with special application

Range (adjustable depending on application):

- 0/10 or 0/100 or 0/1000 (ppb or ppm)
- Calcultation TRS, mgS/m³, UO e/m³, T VOC

Relative Standard Deviation:

- RSD < 3 % on concentration over 48H
- RSD < 0.5% on retention time over 48H

Cycle Time for the following different analyses:

Ex. :

H2S/TS

120s 600s

 H2S, SO2, MM, EM, DMS, DMDS, DES, IPM
 H2S, SO2, MM, EM, DMS, DMDS, DES, IPM TBM, NPM, 2BM, IBM, NBM, MES and THT

1200s

Supervisor:

- Embeded computer Windows® based with LCD display
- 32 GB of Hardware storage on SSD memory

Communication:

· Ethernet, remote control

Gas supply:

- Carrier: Dry air or N2 (3 bars): ≤ 4 ml / min.
- CALIB: in continuous ~ 50 ml / min.
- · CALIB during validation ~ 250ml/min for M52 configuration
- Pneumatic valve 90ml/commutation

Power supply:

Main: 230V 60Hz or 115V / 50Hz

Electrical consumption:

• 150 VA

Dimensions and weights:

Rack: 19" (5U)

Height: 222 mm
 Width: 482 mm

Width: 482mmDepth: 660 mm

· Net weight: 22 Kg

Wall mounted box :

Height: 222 mm

• Width: 482mm

Depth: 660 mm

Net weight: 22 Kg

To order:

VigiEnose

To contact us: info@chromatotec.com

Model: V10022

Chromatotec® is continuously improving its products, therefore these specifications are subject to change without notice



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