



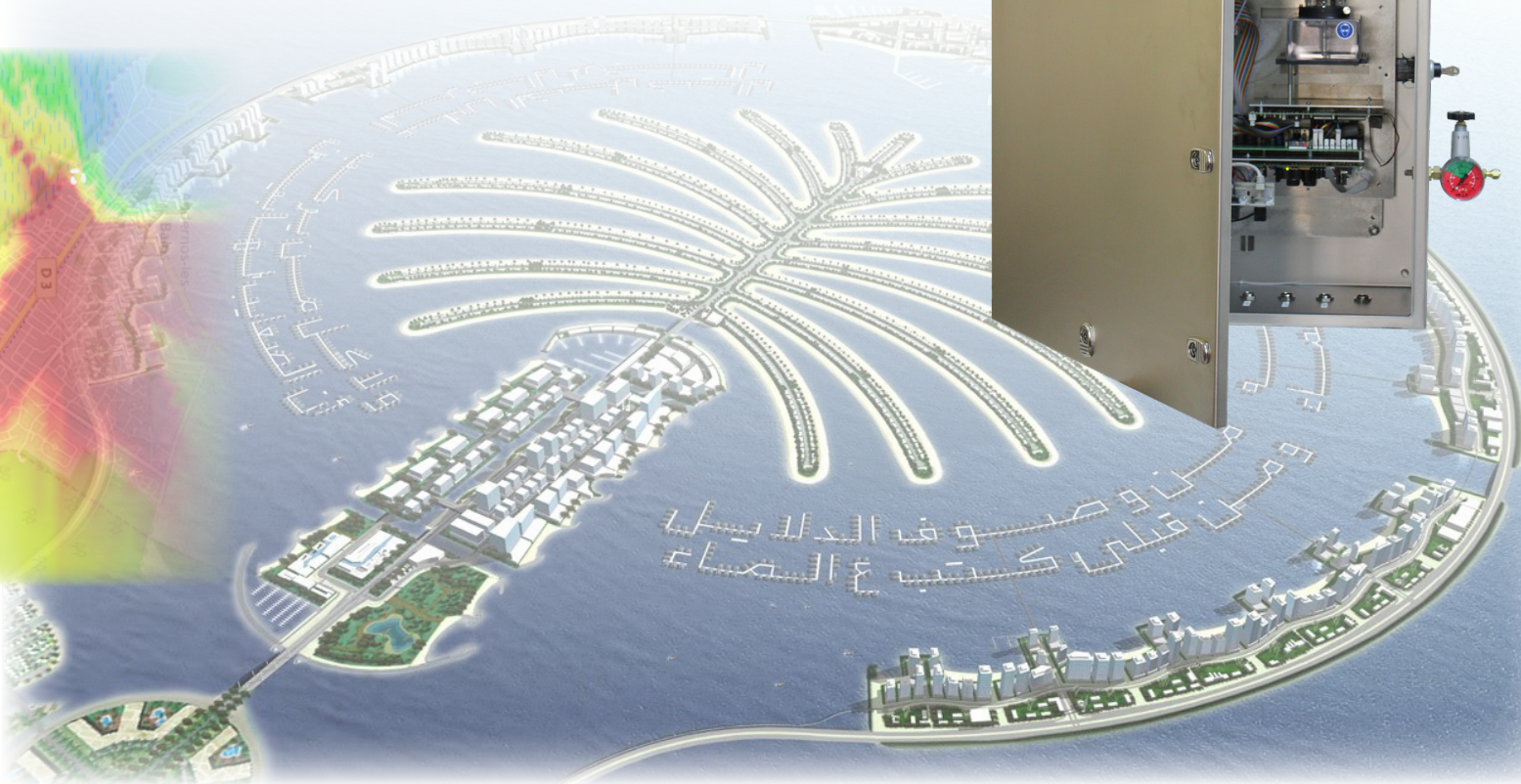
Online Gas Analyzer Experts



# Online Odor Monitoring

vigi e-nose Analyzer  
NEW E-NOSE GC BASED TECHNOLOGY

Waste • Industry • Composting • Water •  
Rendering • Refineries



VOCs • H<sub>2</sub>S • MERCAPTANS • SULFIDES • ODORANTS • ODOR • NH<sub>3</sub>

# vigi e-nose analyzer

Odor monitoring with speciation  
of Sulfurs & VOCs at ppb levels

## Revolutionary network of field-based electronic nose

- Most sensitive e-nose of the market with detection lower than what human nose can detect (as low as 1 ppb for H<sub>2</sub>S)
- Capabilities to deploy non-limited number of units on industrial site
- Unique technology able to monitor tVOCs, Odor unit, Sulfurs speciation
- Odor intensity monitoring by default without training based on odor thresholds
- Odor unit concentration calculation when trained with EN13725 or ASTM 679-E04 using dynamic olfactometry
- Analytical part of the vigiOdor continuous monitoring platform used for odor mapping (odor & chemical impact)

## Intelligent measurement

- Alerts when concentration levels exceed a specific defined value
- Integration of signal on PLC with servomechanism to start or stop a deodorizing process

## Reliable data & secure results

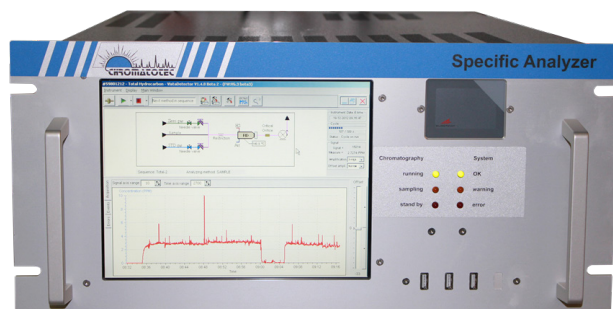
- Automatic data validation using internal permeation tube to check data results
- Repeatability of the results despite process variation,
- No cross interferences with other molecules (no sensors used, no drift)
- Speciation of compounds to understand possible odor contamination

## Scalable solution to predict odor nuisance

- Modular solution with capabilities to plug additive analyzer on vigiOdor web platform to deploy network of e-noses
- Capabilities to integrate multiplexer option to collect automatically samples on several points and do analysis with unique instruments

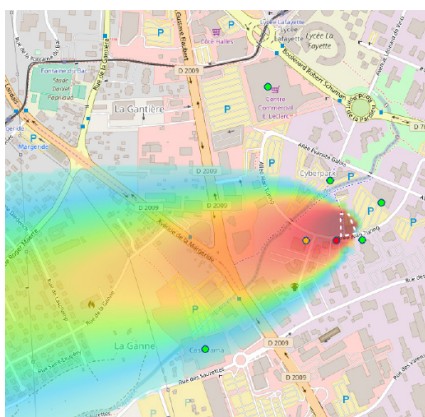
## Easy maintenance

- No need of training to predict odor intensity web process varies
- Remote access on analyzer and accessories



# vigi e-nose analyzer

## Network for continuous monitoring of odor & pollutant gases



### CONTINUOUS MEASUREMENT OF CONCENTRATIONS

- Odor, in odor unit (EN 13725, ASTM E679)
- Pollutant gases, in ppb or ppm :

tVOCs or NH<sub>3</sub>, Sulfurs (H<sub>2</sub>S / Mercaptans : MeSH, EthylSH, PropylSH/ Sulfides : DMS / DMDS ) at ppb levels

### DYNAMIC DISPERSION PLUME IN THE NEIGHBORHOOD

- Dynamic 3D mapping of dispersion plumes
- Calculations of concentrations in the vicinity of the site(s)
- Automated dispersion reports

### REAL-TIME ALERTS

- Configurable alert thresholds per molecule, odor or group of molecule
- Notification by warning siren, flashing light, sms, email, etc

### CONTROL OF AIR TREATMENT FACILITIES

- Automatic activation & deactivation based on emissions levels
- Amount of additives adjusted to the odor concentration

# Technical Specifications

<b>Parameters measured</b>	Sulfurs (H <sub>2</sub> S, MeSH, EtSH, Propyl-SH, DMS, DMDS), Odor concentration and Total Sulfur, tVOCs including NH <sub>3</sub> , Amines, Sulfurs, BTEX and more
<b>Technologies</b>	Mixed technologies with autoGC with electrochemical wet cell with reservoir for long term stability & PID detector
<b>Detection limits</b>	Down to 1 ppb for H <sub>2</sub> S, DMS, MM, EM, SO <sub>2</sub> 50 ouE/m <sup>3</sup> limited of the olfactometer
<b>Range</b>	Adjustable depending on application: 0/10 or 0/100 or 0/1000 (ppb or ppm) Calculation , mgS/m <sup>3</sup> , UO e/m <sup>3</sup> , tVOCs
<b>Relative standard deviation</b>	RSD < 3% on concentration over 48 h RSD < 0,5 % on retention time over 48 h
<b>Cycle Time</b>	- H <sub>2</sub> S/TS in 120s - H <sub>2</sub> S, SO <sub>2</sub> , MM, EM, DMS, DMDS, DES, IPM in 600s - H <sub>2</sub> S, SO <sub>2</sub> , MM, EM, DMS, DMDS, DES, IPM TBM, NPM, 2BM, IBM, NBM, MES and THT in 1200 s
<b>Supervisor</b>	Embedded computer Windows® based with LCD display & 128 GB of Hardware storage on SSD memory
<b>Communication</b>	Ethernet for remote control, 3G modem
<b>Power Supply</b>	Main: 230V 60Hz or 115V / 50Hz
<b>Electrical Consumption</b>	Mean power consumption 100 W
<b>Dimensions and weights</b>	Rack: 19'' (5U) • Height: 222 mm • Width: 482 mm • Depth: 660 mm • Net weight: 22 Kg Wall mounted box : • Height: 222 mm • Width: 482 mm • Depth: 660 mm • Net weight: 22 Kg
<b>Norms and certifications</b>	Fully compliant to ASTM D7493-08, ISO 19739:2004, DIN 51855 CSA Class 1 Division 2 group B, C&D ATEX : Zones 1 and 2 GROUP IIC T4 EN 13725, ASTM E679

## **AMERICA / US**

CHROMATOTEC America Inc.  
18333 Egret Bay Blvd, Suite 270,  
Houston TX 77058 - USA  
Phone: + 1 (281) 335 4944  
Fax: +1 (281) 335 4943

## **EUROPE - AFRICA - MIDDLE EAST**

CHROMATOTEC Europe  
15 rue d'Artiguelongue - St Antoine  
33240 Val de Virvée - FRANCE  
Phone: +33 (0) 557 940 626  
Fax: +33 (0) 557 940 620

## **ASIA - OCEANIA**

CHROMATOTEC Asia  
Room 1806, Building 1,  
Wanda Plaza, No.93, Jianguo Avenue,  
Chaoyang District, Beijing 100022 - CHINA  
Phone: + 86 (0) 105 960 3283