

ONLINE ANALYTICAL SOLUTIONS EXPERTS

GAS ANALYZER GC 866

THT MEDOR®

Online analysis & control of gas odorisation





Model: M31022

Model: M31022-ATEX-Z1

THT MEDOR® applications:

Odorisation processes:

Continuous monitoring of THT levels in natural gas
Automatic THT injection level control
User definable alarm thresholds
Multiple stream analysis (Upstream / downstream)

SCAN or CLICK ME



Deodorisation processes:

ppb level analysis (Detection limit: 5 ppb THT)
Automatic alarm generation
Catalyser protection



Standard:

ASTM D7493-22, ASTM D7165-22, ISO 19739:2004, DIN 51855/7



Certifications:

GOST, ATEX, IECEx, CSA, CSA international

<u>ASTM D7493-22</u>: Standard Test Method for Online Measurement of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatograph and Electrochemical Detection







Chromatotec® is specialised in VOC, Sulfur and permanent gases analysis at trace and ultra trace levels (ppm, ppb, ppt).

Please visit our website for more details.

Updated: September 2023

TUT

TBM

THT MEDOR®

Online analysis & control of gas odorisation



Description:

• THT MEDOR® is an autoGC-ED (MEDOR® Electrochemical wet cell Detector) for the analysis and monitoring of THT and TBM in natural gas and gaseous

Principle:

- · Automatic sampling using a loop
- · Automatic loop injection on packed column
- · Isothermal gas chromatograph
- Detection of THT and TBM eluting from the column performed by MEDOR® Detector: Electrochemical wet cell Detector which is SSD Sulfur Specific Detec-
- · Signal provided by reaction between the wet cell electrolyte and the sulfur compounds

KeyPoints:

- Fully compliant with ASTM D 7493-22 : Standard Test Method for Online Measurement of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatograph and Electrochemical Detection.
- · Automatic calibration/validation of the data, with embeded permeation tube
- · Continuous monitoring with automatic online sampling
- · Analytical performances:

Specific, linear 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 with electrolyte, up to 10 years

Low gas consumption, can be reduced in option

More than 10 years data storage: full chromatogram

No cylinders required thanks to internal calibration tube and gas generators

- · Automatic control with process device
- Intelligents system with tunable and interactive alarm levels
- · Powerful VISTACHROM Chromatotec® software: Remote monitoring & injec-

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 32 streams with one analyser)
- Explosion proof version Exp or Exd for ATEX, IECEx zone 1 and 2 group IIC T4 and also for CSA C1D2 group B, C & D T4
- Calculation modules (Average / Statistics / Odor index and more)
- Automatic data transfert through: Module for 4 outputs 4-20 mA (with 0 mA for instrument default) / 0 - 10 V / MODBUS RTU or TCPI IP or MGS1
- · Nitrogen or air generator for safe and hasardous area
- 24 V DC power supply
- · Electric selection valve to reduce air consumption
- · Liquid injection valve from LPG up to condensates
- · High concentration injection valve up to 5%
- · Wall mounted box XXX934
- · Liquid injection valve for LPG analysis
- Touch screen on the front panel for Exp version (only ATEX)
- · External cylinder inlet for automatic calibration from external cylinder
- MFC for multipoint calibration from internal CALIB and/or from cylinder
- · Zero method

Product technical specifications:

Compounds Analysed:

• THT - TetraHydroThiophene and TBM Ter Buthyl Mercaptan

Detection Limit:

- ppm Model 1 mg/m3
- ppb Model 0.3 mg/m3

Detection Range:

- ppm model 1 to 50 mg/m3
- ppb model 0.3 to 3.0mg/ m3 (Ranges adjustable depending on Application)

Relative Standard Deviation:

- RSD < 2 % on concentration over 48H
- RSD < 0.6% on retention time over 48H

Cycle Time:

- THT and TBM 180s (for one stream)
- THT and TBM 240s to 300s (for multi stream)

Supervisor:

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

Linearity:

> 0.995 for all compounds

Communication:

- · MODBUS RTU included in standard
- · Ethernet, remote control

Gas supply:

- · Carrier Gas: N2 (3 bars): 10 ml/min
- · Internal calibration: 50 ml/min (if selected)
- Sample inlet 1 bar (160 ml/min)
- · Pneumatic valve 90 ml/commutation

Power supply:

- Main: 230V / 60Hz or 115V / 50Hz
- · In case of power loss, the isntrument will restart automatically

Electrical consumption:

Mean: 150 VA

Dimensions and weight:

• Rack: 19" - (5U)

· Height: 222mm Width: 482mm

• Depth: 600mm

· Net weight: 22Kg

Exp version:

- · Height: 800mm
- Width: 600mm
- Depth: 320mm
- · Net weight: 40Kg

To order:

THT MEDOR®

inbuilt computer - 5U THT MEDOR Exp ATEX Z2 THT MEDOR Exp ATEX/IECEX THT MFDOR Fxd ATFX 71 THT MEDOR Exd IECEx Z1

Model: M31022

M31022-ATEX-Z2

M31022-ATEX-Z1 M31022-ATEX-Z1-Exd M31022-IECEx-Z1-Exd

Chromatotec® is continuously improving its products, therefore these specifications are subject to change without notice To contact us: sales@chromatotec.com

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