ONLINE ANALYTICAL SOLUTIONS EXPERTS

GAS ANALYZER GC 866

THT MEDOR®

Online analysis & control of gas odorisation

TBM

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)

THT

SCAN or CLICK ME

Deodorisation processes:

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

24 7 365 TURN KEY SOLUTION

Standard:

ASTM D7493-22,ASTM D7165-22, ASTM D5504-20
ISO 19739:2004, DIN 51855/7

ASTM INTERNATIONAL Standards Worldwide - Home

Certifications:

GOST, ATEX, IECEx, QPS

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

US FIELD CERTIFICATION U 104723

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: October 2025

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 fuels.

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 Detector.
- 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 & 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 32 streams with one analyser)
- Explosion proof version Exp or Exd for ATEX, IECEx zone 1 and 2 group IIC T4 and also for 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
- Automatic tank filling
- Sealproof detector

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

CLICK HERE FOR ADDITIONAL DIMENSIONS DETAILS

To order:	Model:
THT MEDOR® inbuilt computer - 5U	M31022
THT MEDOR Exp ATEX Z2	M31022-ATEX-Z2
THT MEDOR Exp ATEX/IECEx	M31022-ATEX-Z1
THT MEDOR Exd ATEX Z1	M31022-ATEX-Z1-Exd
THT MEDOR Exd IECEx Z1	M31022-IECEx-Z1-Exd

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

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