ONLINE ANALYTICAL SOLUTIONS EXPERTS

GAS ANALYZER GC 866

BENZENE

TOLUENE

ETHYLBENZENE

XYLENES (O,M,P)

IAA

1,3 BUTADIENE

ETHYLENE-OXIDE (IN OPTION)

airTOXIC^{BTX} PID

a GC/PID for automatic monitoring of BTEX.
In air, water or soil

Approved and installed by US EPA

Model: A73022

Model: A73022 Exp

Environment Monitoring:

BTEX: 5 or 7 compounds
Non urban areas
Urban areas
Fence line refinery
Indoor air
Outdoor air

SCAN or CLICK ME

Process:

Industrial Hygiene
Fence line

mCERTS
CSA MC130231/06
CSA MC130230/07

Certified
EN 14662-3
EN 15267-1
EN 15267-2
QAL1

Compliant with EN 14662: No interferences with BENZENE

Pattern Approval Certificate of the Measuring Instruments of PR China

Ranges available:
0.032 - 3250 µg /m^3
0 - 1000 ppb

PA 2010-C212

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: October 2025

airTOXIC^{BTX} PID

a GC/PID for automatic monitoring of BTEX in air, water or soil

Principle:

This instrument uses a port valve with a single absorbent trap, and a 30 meter metallic 0.28 mm ID column.
Minimum detection level as low as 10 ppt for Benzene or 1,3-Butadiene (A76022) in ambient air.
Miniaturization, sensitivity, mobility and flexibility are its main features.
Everything from the sample port up to the data storage is integrated in a 19"-rack 5U.

Programmed gradient temperature up to 202°C for the column oven and pressure/flow control of the carrier gas .
Linearity on area with $R^2 > 0.995$
European range: 0.45 to 45 µg/m³ = 0.1 to 14.5 ppb.

Before delivery the analyser is tested for one week by our quality control department.
Photo ionisation detector (PID), 10,6 eV lamp.
Self-cleaning of the lamp ensures high stability.
Bi-directionnal RS-232 C to transfer data and results to the internal computer.

Vistachrom software enables the user to view and store data on an industrial computer. It provides user friendly utilities to recalculate, calibrate and export data and to configure the measurement.
The software allows the calculation of retention time, area, mass or concentration profiles, in any measuring unit.
LCD DISPLAY
Results output: different communication protocols available
CALIB included in A73022/-B MCERTS with Benzene Permeation tube
Automatic validation and autocalibration

Theory:

Photoionization is initiated by the absorption of short wavelength ultraviolet light by a molecule. This can lead to ionization as follows:

$$R + hv \Rightarrow R^+ + e^-$$

If the ionization potential of R is less than or equal to the energy of the photon, hv, then the species are ionized.
The detector consists of a sealed interchangeable ultraviolet lamp that emits a selected energy line.
Lamps with energies of 8.3, 9.5, 10.6 and 11.7 eV are available.
PID is linear.

Options:

- Exp cabinet option hazardous area ATEX zone 1, zone 2 or Class 1 Division 2 T3
- MODBUS RTU
- Internal Multipoint calibration with CALIB and / or cylinder
- Nitrogen generator up to 300 ml/min
- Modem support and remote control
- 4 or 8 analog outputs 4-20 mA or 0-10 V
- 1,3-Butadiene (A76022 or A73022-B)
- Purge module to extract VOC from water for online BTEX analysis
- Naphthalene in option

Product technical specifications:

BTEX analysis: up to 8 compounds:

Benzene, Toluene, Ethylbenzene, Xylenes: Ortho, meta, para cyclohexane, styrene
1,3-Butadiene in option, IAA in option

Lower detection limit (LDL) in automatic mode:

- ≤ 0.01 ppb = 0.0325 µg/m

Detection range and linearity: BENZENE

- 3.25 to 3250 µg/m³ = 0-1000 ppb
- 0.32 to 325 µg/m³ = 0-100 ppb
- 0.032 to 32.5 µg/m³ = 0-10 ppb

Relative standard variation: PRECISION

- Better than 0.3 % over 48h (Retention Time)
- Better than 2 % over 48 h on 1 ppb (Concentration)

Results on LCD:

- Data storage
- 4 or 8 x 4-20 mA or 0/10 V output in option
- MODBUS RTU / JBUS or Bayern Hessen protocol

Cycle time:

- 15, 20 or 30 min (A73022)
- 30 min (A73022-B)
- 20 min (A76022)

Gas supply:

- Nitrogen: 4 ml/min (inlet 3 bars; 1/8" swagelok)
- Air or nitrogen for CALIB: 50 ml/min continuously and 180 ml/min in CALIB method
- Detector cleaning: 3 ml/min
- 15ml/min, Sample inlet (vacuum pump) 1/4"swagelok
- Pneumatic valve 90ml/commutation

Gas supply for Exp cabinet:

- If air used for dillution: 30l/min in continue
- If nitrogen used for dilution: 500 l to purge the cabinet and < 0.5 l/min in continue to maintain overpressure

Sample volume:

- 20 to 400 ml or more (programmable)

Operation Temperature:

- Room with air conditioning: 10 to 35°c

Computerized Electronic:

- 4 USB Connecting Port
- Two RS-232 ports / 1 Ethernet
- Display: 10" TFT Color LCD
- Software: Windows 10 IOT Entreprise LTSC

Power supply:

- main: 230V / 50Hz or 115V / 60 Hz
- battery: 24V (option)

Electrical consumption:

- Average: 150 VA, Peak 360 VA

Dimensions and weight:

- Rack 19" version: Height 222mm, Width 482mm, Depth 600mm, Net weight 22kg
- Exp version: Height 800mm, Width 600mm, Depth 300mm, Net weight 40kg

CLICK HERE FOR ADDITIONAL DIMENSIONS DETAILS

To order:	Model:
airTOXIC BTX inbuilt computer / Calibration & airmoCOM XXX001 included - 5U	A73022
airTOXIC BTX inbuilt computer / airmoCOM XXX001 included - 5U	A73022 Cylinder
airTOXIC VOC - inbuilt computer - 5U	A77022

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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