airTOXIC<sup>BTX</sup> PID

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

Approved and installed by US EPA

Model: A73022

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

Process:
- Industrial Hygiene
- Fence line

Option Purge & Trap (method 502-2) for water quality surveillance

Compliant with EN 14662: No interferences with BENZENE

Pattern Approval Certificate of the Measuring Instruments of PR China

Ranges available:
- 0.032 - 3250 µg /m³
- 0 - 1000 ppb

Chromatotec<sup>®</sup> 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.
**Theory:**

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

$$ R + h\nu \rightarrow R^+ + e^- $$

If the ionization potential of $R$ is less than or equal to the energy of the photon, $h\nu$, 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:**

- MODBUS RTU
- CALIB for A74022
- Automatic validation and autocalibration
- Nitrogen generator up to 200 ml/min
- Modem support and remote control
- 4 or 8 analog outputs 4-20 mA or 0-10 V
- 1,3-Butadiene (A76022)

**Product technical specifications:**

**BTEX analysis: up to 8 compounds:**

Benzene, Toluene, Ethylbenzene, Xylenes: Ortho, meta, para Butadiene (model A76022), cyclohexane, styrene

**Lower detection limit (LDL) in automatic mode:**

- $\leq 0.01$ ppb = 0.0325 µg/m³

**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

**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

**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
- Display: 10” TFT Color LCD
- Software: Windows XP embedded

**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” - (5U)
- Height: 222 mm
- Width: 482mm
- Depth: 600 mm
- Net weight: 22 kg

**To order:**

airTOXIC BTX inbuilt computer / Calibration & airmoCOM XXX001 included - 5U
airTOXIC BTX inbuilt computer / airmoCOM XXX001 included - 5U
airTOXIC VOC - inbuilt computer - 5U

**Model:**

- A73022
- A74022
- A77022

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

To contact us: info@chromatotec.com

**WWW.CHROMATOTEC.COM**