

# Wall Mounted Benzene Monitor

## *Ion Science Titan Benzene Monitor*

Following extensive research and development, the Titan is the first fixed, continuous, real-time benzene specific monitor on the market. Designed to specifically detect benzene ranging dynamically from 0.1 ppm to 20 ppm in petrochemical environments, providing the ultimate safety monitor for plant and workforce.

Titan samples gas from the local environment once per minute. Within 60 seconds, the sample is conditioned to enable precise benzene measurement and signal communications.

Titan's continuous, real-time measurement allows trends over time to be monitored and communicated over 4-20 mA or RS485. Data is stored internally for a minimum of two years and can be downloaded remotely to a PC via USB or RS485 for analysis.

Titan provides an immediate warning alarm system with two operator configurable levels, ensuring workers are kept safe and protected to the standards required on site. The instrument incorporates two relay outputs allowing the user to install their own required alarm system.

Titan is designed to be easily installed and serviced. Its modular design allows the *Ex d* case to be installed well in advance of commissioning. The service module can be removed and replaced as a remotely serviceable plug-and-play cartridge.

### FEATURES

#### The only truly selective wall-mounted benzene monitor

- Fast and accurate detection of benzene down to 0.1 ppm
- Minute by minute sampling providing continuous real-time data
- Robust separation method ensures benzene specific readings
- Internally regulated heating for stable operation at extreme temperatures

#### Safety

- Clear display & visual alarms for indication of benzene levels
- Two user-definable independent alarm levels including optional real-time STEL calculation
- Two relay outputs provide an immediate warning alarm
- Meets ATEX & IECEx approvals (CSA approval pending)

#### Ease of use & service

- Modular design for ease of installation and servicing
- Service-free six months operation
- Simple two button interface for menu navigation
- No consumables

#### Best available photoionisation (PID) detection

- PID independently verified as best performing on the market
- In-built humidity resistance with no need to compensate
- Anti-contamination design for extended field operation



### APPLICATIONS INCLUDE

- Oil & Gas
- Petrochemical
- Chemical
- Health & Safety
- Offshore

**CALL GEOTECH TODAY (800) 833-7958**

**Geotech Environmental Equipment, Inc.**

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### SPECIFICATIONS

<b>SENSOR TYPE</b>	PID, 10.6 eV lamp coupled with selective filtering
<b>SELECTIVITY</b>	Benzene specific within typical petrochemical matrix
<b>RANGE</b>	0 - 20 ppm
<b>MEASURING FREQUENCY</b>	One minute
<b>LOWER LIMIT OF DETECTION</b>	0.1 ppm
<b>ACCURACY</b>	±0.05 ppm or ±10%, whichever is greater
<b>TEMPERATURE STABILITY</b>	Internally heated
<b>SAMPLE FLOW</b>	200 ml/min
<b>DISPLAY</b>	Graphical BW LCD 64 x 128 pixels with back light Bright LEDs for normal operation, fault and alarm Two magnetic switches for menu operation
<b>HAZARDOUS AREA SAFETY APPROVALS</b>	ATEX/IECEX: Ex II 2G Ex d II B+H2 T4 Gb (-20°C to +55°C)
<b>INGRESS PROTECTION RATING</b>	Designed to IP65 (cable gland dependant)
<b>HUMIDITY</b>	0-100% RH
<b>MINIMUM SERVICE PERIOD</b>	Selective filter six months PID lamp one year
<b>CABLE ENTRY</b>	Two 3/4 NPT gland threads
<b>POWER</b>	Vin (nom) 24 V DC @ 3.2 A (recommended) Vin (max) 32 V DC @ 2.4 A Vin (min) 19 V DC @ 4.0 A
<b>COMMUNICATION</b>	Isolated 4 - 20 mA output Isolated RS 485 Modbus (simplex/half duplex or fully duplex) USB when lid removed with PC software
<b>DATA STORAGE</b>	On board MMC, minimum of six months
<b>RELAY OUTPUT</b>	Two isolated outputs, voltage free, 24 V DC @ 1.25 A max
<b>WEIGHT AND DIMENSIONS</b>	15 kg (33 lbs.) 219 x 219 x 172 mm (8.6" x 8.6" x 6.8" approx.)
<b>GAS SAMPLE LINE</b>	10 m max length, PTFE, 6 mm OD, 4 mm ID

### ACCESSORIES

Titan is supplied with an exclusive range of accessories.

Contact Geotech for more information

1-800-833-7958

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