AQUAGAS MONITORING SYSTEMS

PCF 530® BTEX PID- AQMS Analyser

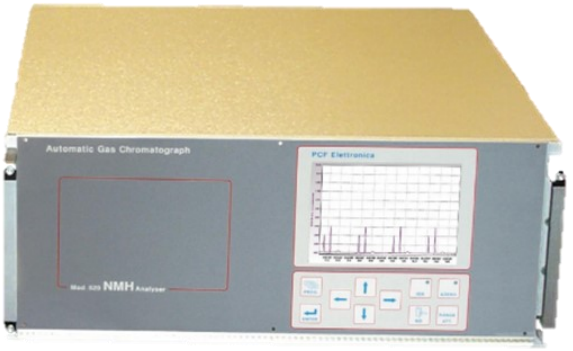
Description - The **FID detector** is a carbon atom counter. A sample is introduced into a micro flame lit by hydrogen and air (1:10 ratio), where the electrical charges generated by the oxidation of Cx to CO are proportional carbon content in the sample. The electrical charges are collected by two polarised electrodes and converted by an electrical circuit into an electronic signal.

The **PCF's Mod. 530 BTEX** (Non Methane Hydrocarbon) gas chromatographic analyser is intended for continuous monitoring of Total Hydrocarbons (THC) and the methane (CH4) fraction **in ambient air and indoor air**.

The separation of methane fraction is based on the chromatographic method. Once specified the CH4 is measured separately and then subtracted from Total Hydrocarbons concentrations. The measuring sequences are managed by the built-in 10 port rotation valves enabling sequential measurement of **Benzene, Toluene, Ethylbenzene and Xylene**. A zero calibration cycle triggered automatically before each measuring cycle guarantees a **high signal stability** and efficient drift compensation.

529® FID - AQMS

High Performance
Air Quality Monitoring



Benzene | **Ethylbenzene**

Toluene | **Xylene**

PCF 530® BTEX PID CEMS - Key Features

- Combination of GC and FID methods
- Proprietary micro FID detector
- Online monitoring of THC, CH4 and NMHC
- 19 inch rack mount enclosure
- Built-in automatic ignition
- Stainless steel connectors for gas inlet/outlet and zero air
- Fully automatic standalone system for fast, accurate and reliable analysis of THC, CH4 and NMHC
- Modular and universal high performance associated gas sampling system
- Keyboard / LCD display interface for configuration & calibration
- PFA and PTFE gas path

1300 850 862 | www.aquagas.com.au | info@aquagas.com.au | 3 Wirranina Place - Currumbin - 4223 QLD

Air Quality Monitoring Systems

The use of a **dedicated sampling system** is necessary to ensure application specific and reliable sample preparation.

AquaGas sampling equipment and solutions cover a large range of applications within Air Quality Monitoring industry. Our gas coolers, heated sampling probes, heavy duty pumps (…) enable efficient ambient or indoor air online measurement with **automated sampling sequences, multipoint monitoring, high performance gas conditioning and deep filtration features.**

PCF 530® FID AQMS- Specifications

INTEGRATION

Dimensions	19inch rack mount unit
Weight	480x190x560 mm 15kg
Flow	500 ml/min.
Response time	TD+T90 < 180 seconds
Warm- up time	5 min
inlet pressure	2kPa - 50kPa
Interface	LCD display + keyboard
Output	RS232 / 4-20mA / dry contact alarm
Power supply	240 VAC 50 +/-1Hz
Analogue outputs	0-1/ Vdc and 4-20 mA for each component
Utilities	Hydrogen : 30 ml/min Pure air : 300 ml/min Service air : 4.5 Bar (63 psi)
Operating conditions	Temp 0-40C Pressure 86-108kPa Humidity 5-85% non-condensing

ANALYTICAL

Measured gases	Benzene, Toluene, Ethylbenzene, Xylene
Measuring ranges	0-100 / 0-500 / 0-1000
Units	µg/Nm3
Background noise	0.01 ppm
Lower Detection Limit	< 0.1 µg/Nm3
Zero drift	≤ 1 µg/Nm3
Span drift	≤ 1 µg/Nm3
Linearity	better than 1% full scale
Calibration standard	100 ppb of Benzene, Toluene and p-Xylene in nitrogen
Accuracy	0.5 µg/Nm3

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