AQUAGAS MONITORING SYSTEMS

PCF 8807GC® Portable Gas Chromatograph

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. PCF's Mod. 8807 is mainly intended for measurements of reactive hydrocarbons in ambient air and/or source gas by subtracting from the total concentration of hydrocarbons to the methane fraction. The analyser however can easily be reconfigured for **specific hydrocarbon measurements.** A sample pump on the back of the pneumatic circuit fills a calibrated capillary, whose content is injected via a 10 port rotation valve into a chromatographic column filled with PQS or a most suitable substrate that allows separation **of methane fraction from the total hydrocarbons.** A microprocessor manages all functions relative to analytical sequences as well as data management, calibration and purge sequences. The software controls preconditioning, analytical sequences and alarm status. The instrument can easily be set for specific hydrocarbons (up to a maximum of **eight species)** by a simple upgrade of the firmware through the front panel interface.

High Performance emissions, indoor and ambient air testing

THC, VOC, aromatics, ethylene oxide, solvents, acetone …

PCF 8807GC® Portable Gas Chromatograph- Key Features

- Efficient operation s/ Low maintenance requirements
- Proprietary micro FID atom counter
- Gas chromatographic speciation of VOCs and HCs
- Transportable rugged case with by an handle and a leather strap
- Extremely low detection limit - LDL Benzene 0.1 ppm
- Local and remote communication through RS 232
- Portable system for fast, accurate and real-time chromatography analysis
- Modular and universal high performance associated gas sampling system
- Keyboard / LCD display interface for configuration & calibration
- Built-in large data storage

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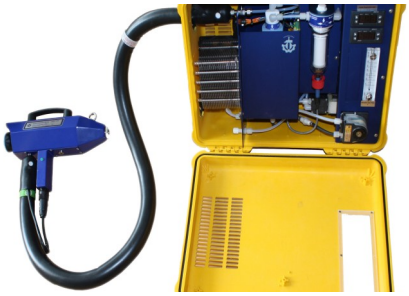
High Performance Sampling Systems

When sampling gas from large combustion plants or blast furnace (…) 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 the power generation industry. Our gas coolers, heated sampling probes, heavy duty pumps (…) enable efficient flue gas testing with **automated sampling sequences, light weight, robust and high performance gas conditioning and deep filtration features.**



PCF 8807GC® Portable Gas Chromatograph - Specifications

INTEGRATION

Dimensions	transportable reinforced aluminium box 150x216x360 mm / 13 kg
Weight	
Flow	600 ml/min.
Response time	from 20 up to 180 sec. max.
Warm- up time	5 min
inlet pressure	2kPa - 50kPa
Interface	640 x 200 pixel 5.5" colour LCD display
Sampling system	Depends on the application Please consult.
Power supply	240 VAC 50 +/-1Hz
Built data storage	Standard MMC (512 Mbytes included) Standard SW packages for windows O.S.
Utilities	Hydrogen : 30 ml/min (from transportable gas cylinder) Purge air : 300 ml/min (from transportable gas cylinder) Service air :4.5 Bar (63 psi)
Operating conditions	Temp 0-40C Pressure 86-108kPa Humidity 5-85% non-condensing

ANALYTICAL

Measured gases	Specific hydrocarbons, e.g. aromatics, ethylene oxide, solvents, acetone, VOcs, THCs, NMHC, CH4...
Measuring ranges	(six ranges) 0-10/20/50/100/200/500 ppm
Units	ppm or mg/Nm3
Background noise	0.01 ppm
Lower Detection Limit	< 1% full scale
Zero drift	± 0.5%
Span drift	± 1%
Linearity	1 % of the selected measuring range
Calibration standard	3 ppm CH4 + 1 ppm C3H8, air balance
Accuracy	1 % of the selected measuring range

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