Series 100 FID
Gas Chromatograph

AGC INSTRUMENTS
Gas Chromatography since 1965

Hydrocarbon Gas Analysis using GC

Features:

- Ease of Maintenance
- Cost Effective
- Maximum Uptime
- Proven Flame Ionisation Detector
- Robust Design
- Automatic Operation
- Minimum Operator Interference
- Sensitivity < 20ppb of Methane
- Flexible Design

Target Market:

- Air Separation Units
- Industrial Gas Producers
- Specialty Gas Manufacturers
- Refinery Gas
- Natural Gas
- Solvent Recovery Units

Flame Ionisation Detector (FID)

Applications:

- Impurities in C_1 to C_5 in Oxygen / in Air
- Impurities in Ethylene & in Propylene
- Refinery Gas Analysis
- Natural Gas Analysis
- Analysis of CO & CO_2 using Methaniser
- Analysis of CO, CH_4 , CO_2 in Light Hydrocarbons

Our Detector:

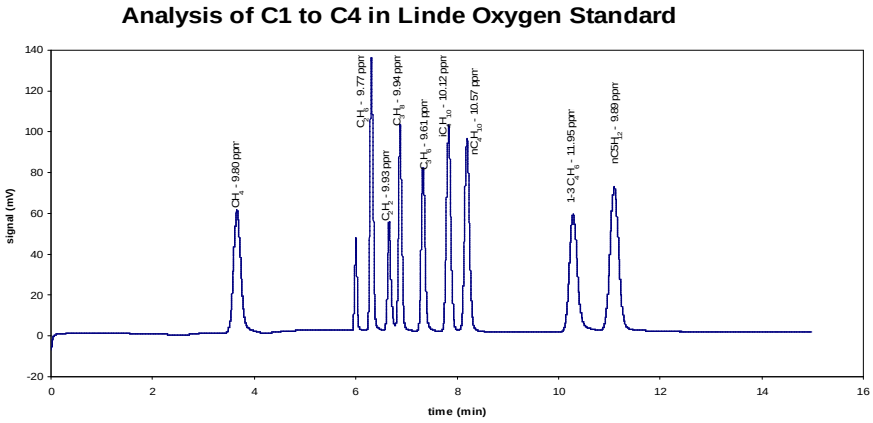
The AGC Flame Ionisation Detector (FID) is used to measure concentrations of hydrocarbons within a sampled gas. The presence of hydrocarbons is detectable by burning the sampled gas in an air-hydrogen flame. Burning just pure hydrogen with air produces only trace amounts of ionisation. The presence of hydrocarbons in the sampled gas, when burnt with an air-hydrogen mix causes high levels of ionisation. The ionisation occurs a result of the carbon atoms present in the sampled gas. The level of ionisation is proportional to the number of carbon atoms within the sample.

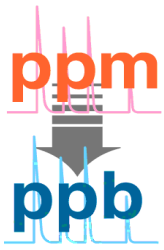
Our Solution:

We work closely with each client in order to ensure that all aspects of the application are understood. Then our applications design team will design a solution specifically with the application in mind. All our systems can be designed for corrosive applications and are manufactured with corrosion resistance materials.

Our After Sale Support:

Installation and Commissioning support is essential to providing a total Turnkey solution. Through our dedicated Distribution Network we are able to provide local support and back-up, in both native language and in English. All our Distribution partners have been selected having the technical skills required to provide an excellent support. Ongoing training is provided with specific training focused on Industrial and Specialty Gas applications.





Specifications:

Detector

Name:	Flame Ionisation Detector
Linearity:	> 10^6
Temp Range:	100°C to 300°C
Sensitivity:	< 10 ppb of CH_4
Response Time:	<0.5 seconds
Noise:	10µV maximum
	~~of operating parameters~~

Power Requirements

110/220/240V , 50/60 Hz

Operating Conditions

Temperature Range: +10°C to 40°C

Gases Required

Carrier Gas:	N_2 , He , Ar with <5ppm H_2O free from CnHm 20-40ml/min
Air:	240ml/min < 5ppm H_2O
H_2:	20ml/min < 5ppm H_2O CnHm < 1ppm
Actuator Gas:	Clean dry air @ 3 bar

Dimensions

W = 19" ; D = 400mm ; H = 10U (450mm)

Output Signal

0 – 1 V (or upon customers specification)

Gas Connections

1/8" stainless steel with Swagelok fittings

Sensitivity Ranges

Range 10^{-9} =2.0 x 10^{-9} amperes
Range 10^{-10} =2.0 x 10^{-10} amperes for 1mV output signal
Range 10^{-11} =2.0 x 10^{-11} amperes
Range 10^{-12} =2.0 x 10^{-12} amperes for 1mV output signal

Headquarters:
AGC Instruments Ltd, Unit 2, Shannon Free Zone West, Shannon, Co. Clare, Ireland
T: +353 61 471632 F: +353 61 471042 E: sales@agc-instruments.com W: www.agc-instruments.com
China Representative Office:
AGC Instruments Ltd, 3th Floor, C1, Townfactory, No.18 Keyuan Road, Daxing Industrial Development Zone, Beijing 102628, China.
T: +86 10 6021 5983 F: +86 10 6021 5902 E: sales@agc-instruments.cn W: www.agc-instruments.com