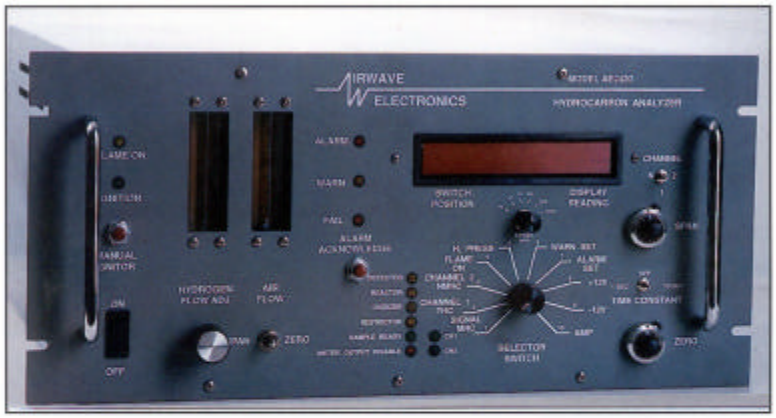
AIRWAVE ELECTRONICS

Model AE2420
Hydrocarbon Analyzer



Features:

- * Stable Baseline
- * Proven Technology
- * Low Detection limit
- * Large 1" Display
- * Easy to Operate
- * Minimum Maintenance
- * No Wet Chemistry
- * Fast Response Time
- * Linear Output in ppm range
- * Single or Multiple Channels
- * Optional Non-Methane Output
- * Temperature Controlled

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Introduction

The AE2420 Hydrocarbon Analyzer is a compact instrument used for monitoring ambient concentrations of total hydrocarbons. Its' simple and dependable design permits safe operation for air monitoring requirements. No other unit can match its sensitivity, response speed and reliability. This instrument far exceeds present requirements and is the logical investment for the more demanding needs of the future.

Proven detection methods and modern technology have provided the Model 2420 HC Analyzer with fast, accurate response times and minimum maintenance requirements. The Model 2420 is ideal in multiple channel systems where speed and reliability are critical.

Operational Principal

The Model 2420 utilizes an established Flame Ionization Detector (FID) to detect the presence of hydrocarbons. This design allows the Model 2420 to perform throughout the multiple ranges with a minimum accuracy of 0.1 ppm.

The sample air is drawn via an external vacuum pump into the FID where it is burned and any Hydrocarbon molecules are converted into ions. An electrostatic field in the burner cause the ions to migrate and collect on an electrode. An electric current is produced which is proportional to the concentration of the hydrocarbons present in the sample air.

High Reliability

Most components on the Model 2420 have more than five years of expected life. They are carefully located and mounted so that trouble shooting can be accomplished in only minutes. The Model 2420 has no expensive "built-in" maintenance requirements, regular changes of corrosive liquids or vibration sensitive alignments.

Specifications

Minimum Detectable Level:	100 ppb
Noise:	0.01 ppm
Response Time:	Immediate
Recovery Time:	Immediate
Precision:	+/-.05% FS
Range:	0 - 10 ppm 0 - 25 ppm 0 - 50 ppm 0 - 100 ppm 0 - 500 ppm 0 - 1000 ppm
Zero Drift:	+/-1% FS/Day
Span Drift:	+/-2% FS/Day
Linearity:	+/-1% FS
Unattended Operation:	7 Days
Sample Flow Rate:	200ml/min
Hydrogen Flow Rate:	140ml/min
Recorder Outputs:	0-100mV, 0-1V 4 - 20mA
Relative Humidity:	0 - 95%
Ambient Temperature:	+10 - +40°C
Weight:	25kg
Cabinet:	Bench or Rack Mount
Sample Pump:	External
Power Requirements:	115 VAC 250 WATTS

Stability

Careful attention to thermoelectric control of the burner block assembly and flow control devices result in zero and span stability that can remain within specifications from weeks to months. The Model 2420 design focuses on stable and reliable performance, and ease of service and maintenance.

Safety

Hydrogen can be supplied from approved generators or cylinders. Cylinders are often manifolded for infrequent exchange. The Model 2420 HC Analyzer is specifically designed for the safe use of Hydrogen. All models automatically stop the flow of Hydrogen or otherwise have excess dilution of air to eliminate the combustion hazard.

Mechanical

The Model 2420 is housed in a rugged aluminum case suitable for bench or rack mounting. Valves, filters, check valves, orifices, regulators are teflon, stainless steel, brass, or other material of construction suitable for the particular application. Terminals and connectors are provided at the rear panel for external connections.

In addition to the basic Model 2420, Airwave Electronics Ltd. provides a variety of options and accessories to meet most user's requirements.