



Model 3010 Portable HFID Total Hydrocarbon Analyser

- Compact, rugged
- Easy to use
- Carbon scrubber for clean air
- Integral heated sample line



Overview

Heated flame ionisation detector is the reference method technique for measuring total hydrocarbons (THC, VOC, TOC). The advantages of this method are that it can be used for hot, wet samples. Maintaining an elevated temperature prevents the dropout of heavy hydrocarbons along the sample line.

This detection method is continuous with a fast response time making it very effective for alarm status monitoring applications and other real time reporting.

The 3010 is suitable for a wide range of applications from incinerators to high concentration solvent users. With good carbon correlation for aliphatics, alcohols, esters, ketones, and aromatics it provides a reliable determination of total hydrocarbon levels.

Operation

We recommend the use of hydrogen/helium mixture as fuel for applications where oxygen levels are unpredictable to minimise the effects of oxygen synergism. The Model 3010 is also available with hydrogen fuel option for ambient applications where oxygen levels are stable.

The Model 3010 has a user friendly interface with status pages for simple diagnostics. It represents a cost effective solution for short term monitoring requirements.

With fuel shut off if flame fails and sample pump inhibitor until oven and heated line are up to temperature, this represents an intuitive, easy to use analyser suitable for even the most inexperienced operators.

Options

Signal SIGEMS software is available for logging and reporting.

Please contact us for further details on these options.

NB. For low particularly low range applications (below 10ppm) we would recommend the Signal Model 3030PM as a possible alternative.

Specifications

Measurement technique	Heated flame ionisation detection (HFID)
Measuring range	0-10ppm up to 0-1% methane 10% option available
Response time	2 seconds to T ₉₀
Sample flow	0.4 to 3L/min
Bypass flow sensitivity	Less than 2% from 1 to 3L/min
Accuracy and repeatability	Better than 1% range or 0.2ppm, whichever is greater
Ambient temperature effects	zero: less than 0.15ppm per DegC span: less than 0.1% of range per DegC
Noise	Less than 0.1ppm or 0.1% of range, whichever is greater
Linearity	Better than 2% of point or 0.5% FSD
Zero drift	Less than
Sample filter	replaceable PTFE 0.4 micron
Concentration outputs	0-10Vdc and 4-20mA analogue
Range output	Volt free relay contacts
Power	110Vac, 300VA plus 400VA (5m heated line), 800VA (10m)
Dimensions	210mm x 300mm x 240mm
Weight	Approximately 12Kg (including bottles)
Operating conditions	Ambient temperature 5-35 DegC
Fuel consumption	H ₂ /He 180ml/min H ₂ only 60ml/min
Options	5m or 10m heated lines available Hydrogen fuel for ambient applications Analyser is supplied with heated line, 1 litre fuel and 1 litre span gas.