SIGNAL INSTRUMENTS

Data Sheet

Model 3000MA Ambient Flame Ionisation Detector Hydrocarbon Analyser

- Low cost
- 0-4ppm up to 0-10% ranges available
- Fast response
- Automatic calibration

Overview

Heated flame ionisation detector is the reference method technique for measuring total hydrocarbons (THC, VOC, TOC). The Model 3000MA is a low cost alternative to the Model 3000HM suitable for monitoring ambient air temperature samples.

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 3000MA is suitable for a wide range of applications from monitoring solvent processes to filtration system research.

With good carbon correlation for aliphatics, alcohols, esters, ketones, and aromatics it provides a reliable determination of total hydrocarbon levels.

Operation

With a detector heated to 130 degrees C, the Model 3000MA is suitable for samples at ambient temperature where heating to higher temperatures to prevent condensation is not necessary.

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 3000MA is also available with hydrogen fuel option for ambient applications where oxygen levels are stable.

Features

The Model 3000MA has a user friendly interface with status pages for simple diagnostics. WIth automatic calibration, range selection and remote control capability it is ideal for CEMs and other low maintenance applications. Analyser has 4-20mA, 0-10V and RS232 outputs as standard.

Options

Signal SIGEMS software is availble for logging and reporting.

Please contact us for further details on these options.

Specifications

Measurement technique	130 DegC FID (flame ionisation detector)
Measuring range	0-4ppm up to 0-1% methane 10% option available
Response	<2 seconds to T_{90}
Bypass flow sensitivity	Less than 2% from 1 to 3L/min
Accuracy and repeatability	Better than 1% of range or 0.2ppm, whichever greater
Zero drift	Less than 2% of range
Linearity	2% of point or 0.5% FSD
Temperature effects	Zero: Less than 0.15ppm/DegC Span: Less than 0.1% range per DegC
Noise	Less than 0.1ppm or 0.1% range
Inlet pressures	Sample: -5 to 15 psi Calibration: 7psi to 30psi
Sample filter	Removable 0.4 micron PTFE
Display	240 x 64 pixel with backlight
Remote control	AK protocol via RS232 port
Power	Switchable 110/230VAC
Dimensions	19" rack mounting 3U high 19" x 133.5mm x 570mm
Weight	Approximately 30Kg
Concentration outputs	0-10V and 4-20mA isolated
Range output	1-8VDC
Ambient temperature	5-35 DegC
Fuel consumption	60ml/min Hydrogen fuel or 180ml/min H_2 /He fuel

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