

Model 3000HM Heated Flame Ionisation Detector Hydrocarbon Analyser



- Internal catalytic air purifier
- 0-4ppm up to 0-10% ranges available
- Fast response
- Reference method for measuring THC
- MCERTS certified

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 3000HM 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

This model features a catalytic air purifier to provide clean air for FID flame and calibration. In addition, there is an input for zero grade air to provide extra stability on low ranges.

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

The Model 3000HM has a user friendly interface with status pages for simple diagnostics. With automatic calibration settings, and remote control capability it is ideal for CEMs and other low maintenance applications.

Options

Signal SIGEMS software is available for logging and reporting.

The Model 3000HM is also available in methane only and methane/non-methane output configurations.

Please contact us for further details on these options.

Specifications

Measurement technique	Heated FID (flame ionisation detector)
Measuring range	0-4ppm up to 0-10% methane
Response	1.5 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 0.1ppm in 8 hours
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