

Multi-Component Gasanalyser

MULTi 2000Plus

NDIR Analyser / Paramagnetic Oxygen Analyser

Plus automatic calibration



Description

In the field of biogas, mainly gases like methane (CH₄, NDIR), carbon dioxide (CO₂, NDIR), carbon monoxide (CO, NDIR) or oxygen (O₂, paramagnetic, see PAROX 2000Plus) are in the centre of interest. The MULTI 2000Plus is a precise and cost effective multi-component gas analyser able to measure above mentioned gases.

Build in a modular housing system, it can be specified with 1-, 2-, 3- or even 4 components as per your requirement. Equipped with a modern micro-controller technology, it is specially designed for a wide field of application in ambient, emission and process gas measurements, e.g. biogas, sewer gas, landfill gas, gases from fermentation processes, toxicity and lower explosion limits.

The analyser has an auto-calibration functionality and a self-diagnosis capability as well as an RS232 interface. If connected to the correct zero gas and test gas, the programmable auto calibration function is capable to fulfil a fully automatic calibration by means of the integrated relays. The operation and parameter setting can be carried out by means of a user friendly 4 key pad and a 16-digit LCD display or also through an RS232 interface.

Specifications	MULTi 2000Plus
Measurement range output	free settable by input of parameters within the measuring range
Measurement ranges	CH ₄ : Standard range 0-10%, 0-100% CO ₂ : Standard range 0-2000ppm, 0-100% CO: Standard range 0-10% O ₂ : Standard range 0-25%, 0-100%, others on request
Measurement signal	4-20mA or 0-20mA (max. apparent ohmic resistance 500 Ohm)
Status output	2 alarm relays, 1 malfunction relay
Output connection	pump relay, maintenance sample gas relay, zero gas relay, test gas relay for the autocalibration
Display	LCD digital multifunction display, indication of measured value: 100.0 %O ₂ ; Flow 99l/h, alarms, malfunction, parameters, total 16 digits
Measuring details	
Accuracy	± 2 % of the measuring range (NDIR) / ± 0.1 % (paramagnetic)
Repeatability	± 1.5 % of the measured value (NDIR) / ± 0.03 % (paramagnetic)
Zero point drift	Zero point ± 2 % of the measuring range per year(NDIR) / ± 0.1 % per week (paramagnetic)
Options	
	<ul style="list-style-type: none"> • pressure compensation (electronic or backpressure regulator) • test gas pump • sample gas filter • external flow display (rotameter) • flow sensor with alarm setting
Design	
Gas connections	PVDF bulkhead connection, for hose with inside ø 4mm
Housings	<ul style="list-style-type: none"> • 19" 3HU Rack • ½ 19" portable • wall mounting Rittal
Power supply	
Voltage	100 - 240VAC 50/60Hz
Application	
	<ul style="list-style-type: none"> • monitoring of Biogas • Sewer gases • Fermentation process control • Enclosed spaces • LEL monitoring