

# COMBIMASS<sup>®</sup> Portable Gas Analyser GA-m

## ATEX certified biogas analysers

The new series of extremely robust, maintenance-poor and efficient portable measuring instruments represents a milestone in the development of mobile gas analyzers.

All common requirements of the analysis of fermentation gas, sewer gas and dump gas from landfills are optimally fulfilled.

Due to easy to service structure, with modules plug-in and user replaceable battery packs, the systems can be extended at any time and upgraded to the newest technology.

The data can be stored measuring point-referred. The internal data logger is very efficient.

The mobile measurement is expandable to an automatic, stationary analysis station with firm measuring program and auxiliary options like integrated temperature, mass of gas and pressure measurement as well as transmission of the data to the master computer.

Servicing contracts with supply of spare devices ensure an availability of 365 days in the year.

### Special Features COMBIMASS<sup>®</sup> GA-m

- Up to 7 gas analysis channels
- 4 Wavelength optical infra-red analyser with automatic pressure and temperature compensation
- Powerful internal sampling pump
- User replaceable sample micro-filter
- Field replaceable/rechargeable battery pack, up to 5 electro-chemical sensors plug-in expandable
- Optional portable flow and temperature probes
- Display of compensated biogas mass flow in Nm<sup>3</sup>/h with optional insertion sensor



Specification of COMBIMASS <sup>®</sup> GA-m	GA-m (GA-m 3)	GA-m1 (GA-m 2)
Infra red CH <sub>4</sub> analysys	0-100%	0-100%
Infra red CO <sub>2</sub> analysys	0-100%	0-100%
Electrochemical O <sub>2</sub> analysys	0-25%	0-25%
Electrochemical H <sub>2</sub> S analysys	0-2,000 ppm (0-5,000 ppm)	0-2,000 ppm (0-5,000 ppm)
Electrochemical NH <sub>3</sub> analysys	0-1,000 ppm	-
User specified gas channels	Upgrade possible, f.e. H <sub>2</sub> 0-1,000 ppm or 0-2,000 ppm	
Re-calibration / maintenance	using test gas, 1-2 times per year	
Gas flow, 4 – 20 mA input, pressure- and temperature compensated	0.03-25.0 Nm <sup>3</sup> /s 0 – 12,000 Nm <sup>3</sup> /h, depending on iD of the gas pipe	
Gas temperate sensor input	-10 to 100°C	
ATEX classification	EEx ib IIB T1 (Zone 1,2)	
Communication	USB, RS232 as an option	
Stationary operation	Upgrade with Docking station as an option possible	
Datalogger	More than 2,000 sets of data, related to different sampling points	