

Multitec® BioControl system – BioControl 2

The entry-level model
for individual process optimisation



BioControl 2: user-friendly, flexible, efficient

The entry-level model for automated process optimisation

Multitec® BioControl is the ideal system for the continuous automatic measurement and monitoring of the composition of gas: simple, safe and efficient. Be it in a **biogas plant, landfill, wastewater treatment plant** or even a **composting plant** – the unique device combination of a stationary unit and mobile gas measuring device offers a cost-effective and easy switch to process optimisation and control.

The BioControl 2 fulfils the main measuring requirements of all **small to medium-sized plants**: it saves time and money, it is user-friendly and flexibly customisable. For plant manufacturers the BioControl 2 is an option that offers high quality technology at a very reasonable price.

The Multitec® BioControl system consists of the stationary, fixed BioControl 2 device and a mobile gas measuring device. Depending on your unique requirements, you can choose between the Multitec® 540 or the Multitec® 545 mobile measuring device.

Operating principle

The BioControl 2, with its two fixed measuring inputs, offers all you need to automatically and thus effortlessly measure the exact gas composition in a plant from a stationary position. The system allows reliable data storage and continuous monitoring. For example, the first stationary measurement location can continuously check the gas composition at the motor while the second stationary measurement location checks the raw gas composition. The mobile measuring device, on the other hand, can be easily used for infinite manual measurements at remote parts of the plant at irregular intervals.

Data can be transferred via LAN, or optionally by Profibus module. The alarm relay can be freely configured via the touchscreen.

Advantages of the Multitec® BioControl system

- **Large, state-of-the-art 4.3" colour touchscreen:** easy user-defined settings, language selection
- **Flexible configuration to individual requirements:** measurement locations/cycles, save intervals, limits, alarm thresholds
- **User settings can be restored from first day of use** (saved on USB stick)
- **Safe, reliable measuring results** thanks to self-tests during operation
- **Sturdy and durable:** all relevant components resistant to aggressive gases
- **Autonomous and regular saving of all measurement values and settings** on USB stick; no data loss, no manual protocols, seamless documentation
- **Comprehensive service:** stationary unit largely maintenance-free; fast, first-class support thanks to customer-friendly remote maintenance and diagnostics – anywhere in the world by internet; simple automatic calibration and adjustment using test gas (optional)



Multitec® 540 and Multitec® 545: independent measuring anywhere

The mobile Multitec® 540 and Multitec® 545 gas measuring devices can measure the concentrations of up to five gases simultaneously. This makes them ideal for the precise analysis and monitoring of the gas mixtures produced in biological processes. Equipped with infrared sensors, these devices reliably determine methane and carbon dioxide concentrations without distortion from other gases. The large display shows the values simultaneously and clearly, so that everything can be read off at a glance. The mobile measuring devices can also be fitted with optional electrochemical sensors for calculating oxygen, hydrogen sulphide and carbon monoxide concentrations. The measurement data saved in protocols can be easily sent to a PC by network or USB.



Advantages of the Multitec® 540 | Multitec® 545

- **Certified explosion protection:** TÜV 07 ATEX 553353 X  II 2G Ex d e ib IIB T4 Gb, IIC when devices are used with TG8 carrying bag; this means that the (raw) biogas produced can be analysed in all parts of the plant
- **Easy to service design, minimal downtime, highly efficient:** quick and easy maintenance thanks to longlife built-in sensors; mobile devices easy to post (maintenance by SEWERIN Service or local utility)
- **Very user-friendly** thanks to jog dial, intuitive menu navigation and large function keys
- **Selective infrared sensors** allow distortion-free measurement of the concentrations of hydrocarbons and carbon dioxide
- **Longlife electrochemical sensors** for measuring the concentrations of oxygen and toxic gases; Multitec® 545 expanded H₂S measuring range 5,000 ppm, Multitec® 540 up to 2,000 ppm; device selection according to individual range of application
- **Economical and user-friendly power supply:** four replaceable AA-size rechargeable batteries or disposable batteries
- **Long operating times** of at least 7 hours, quick charging in 4 hours
- **Practical, steady U-shaped grip for carrying and setting up:** comfortable to carry lightweight device (1000 g)
- **Semi-transparent, clear 4.3" matrix display:** with practical backlight, excellent readability, even in direct sunlight
- **Convenient data transfer** to computer by USB port

Advantages at a glance

- ✓ Easy and versatile measuring
- ✓ Saves time and money; maximum safety thanks to continuous automated measurement
- ✓ Extremely user-friendly and customisable configuration
- ✓ Monitor and then optimise processes e.g. by substrate adjustment
- ✓ Reliable component protection according to manufacturer's instructions by way of self-defined alarms
- ✓ Improve gas quality and increase yield

The advantages of the new measuring system speak for themselves. Compared to conventional systems in use, the Multitec® BioControl is the simple, user-friendly and cost-effective solution for optimising the processes in small to medium-sized plants.



Optional accessories

- SPE BioControl
- Bio IR test gas
- Mobile gas cooler



Please contact us for a comprehensive quotation, including additional technical specifications and information on accessories.