



Monitor and optimise your biogas plant

Check gas composition and optimise production quantity

mobile & stationary



Improve quality and reliability with the Multitec[®] BioControl device combination

The base station **BioControl 2/4/8**



Measurement automation stationary

- + up to 8 measuring locations
- + simple documentation
- + easy integration into your plant

The mobile **Multitec® 545/540**



Increase in methane content

- + continuous monitoring of gas composition
- + measure up to 5 gases
- Save time and money
- Calculate plant efficiency at any time. This makes it easier to adapt the substrate.
- Document gas parameters more reliably thanks to automation.

The BioControl 2 | 4 | 8 stationary base station offers even more



and increasing safety at biogas plants:



- + Automated monitoring at several measuring locations, e.g. at the fermenter, during gas purification and preparation
- Perfect for your requirements: flexible configuration of measurement locations, measuring cycles, storage intervals and limits
- + Merges mobile and stationary measured values
- + Flowmeter for determining the exact volume of biogas produced in standard cubic metres (Nm3) - the essential base value for calculating motor efficiency
- + Seamless documentation as all measurement values are saved independently on a regular basis
- + Automatic sensor calibration using test gas
- Modbus TCP is standard equipment so there are no additional costs for fieldbus communication with TCP/ IP protocol
- + Optional fieldbus communication module: Profi Bus (serial) and Profi Net (Industrial Ethernet System for higher speeds and more flexibility)
- + In addition, BioControl 4 and BioControl 8 also permanently monitor the flow volume, gas temperature and gas volume

Even more advantages of the Multitec® 545 | 540 mobile measuring device



information:

- + Effectively monitor and analyse gas mixtures
- Measure methane and carbon dioxide precisely, without cross-interference from other gases
- + There is also the option to measure the following gases: Oxygen, carbon monoxide, hydrogen and hydrogen sulphide (Multitec® 540: up to 2000 ppm; Multitec® 545: up to 5000 ppm)
- + With explosion protection: TÜV 07 ATEX 553353 X: II 2G Ex db eb ib IIB T4 Gb, for: CH_4 , C_3H_8 , C_4H_{10} , C_9H_{20} , H_2S , CO (basic device without leather bag) II 2G Ex db eb ib IIC T4 Gb, for: CH_4 , C_3H_8 , C_4H_{10} , C_9H_{20} , H_2S , CO, H₂ (basic device with leather bag)
- + Ready to measure shortly after switching on Easy to adjust using test gas
- + Can be leased within Germany; regular device exchange every 6 months with no additional costs; only with purchase of base station (BioControl)
- + Monitoring the film interspace according to the technical rules for plant safety (TRAS 120)







Mobile measurement even at remote measuring points



Check values from a distance

"For me, it's important that the plant runs reliably. That means as little downtime as possible and that I am able to detect potential undesirable developments, such as increased sulphur levels, quickly in order to prevent damage.

The Multitec® BioControl system is a great help in this regard. It also helps me optimise the plant. For example, I know exactly when I need to change the activated carbon. That saves money. And thanks to Multitec® BioControl I am always ready with information for my service providers and the authorities. That builds trust. "



Key data for the Wiggert family's biogas plant at Haslachhof in Löffingen:

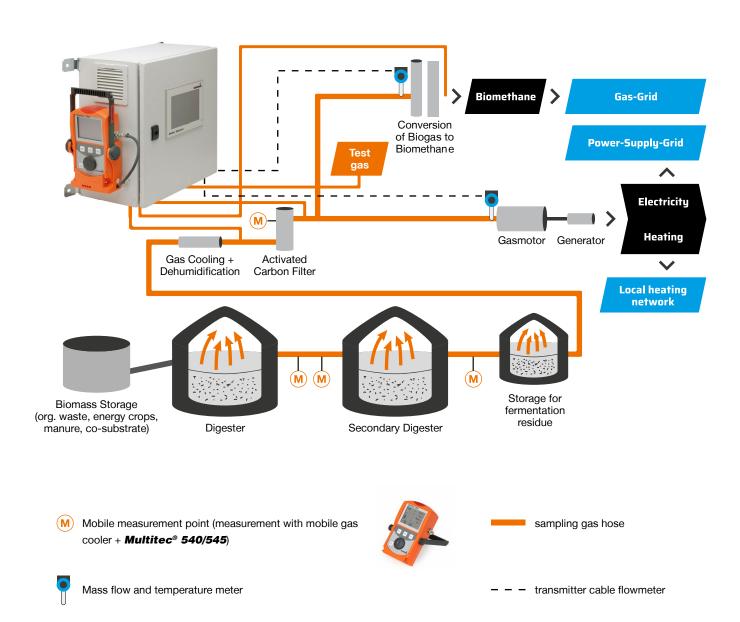
one cogeneration plant (CHP) with 1563 kW and two CHPs, each with 549 kW, 200 m³ buffer, fermentation residue storage with a volume of 6700 m³ and a gas storage tank of 5000 m³; the total installed electric output is 2.6 MW.

Wolfram Wiggert, Haslachhof, Löffingen

One solution, many possibilities

With the BioControl device combination you can record gas composition and volumes flexibly at any time. Do you only want to measure raw gas and pure gas at the filter to protect your system's motor and to document gas quality? Or would you also like automated measurements at the secondary fermenter and repository in order to increase process efficiency? Both are possible.

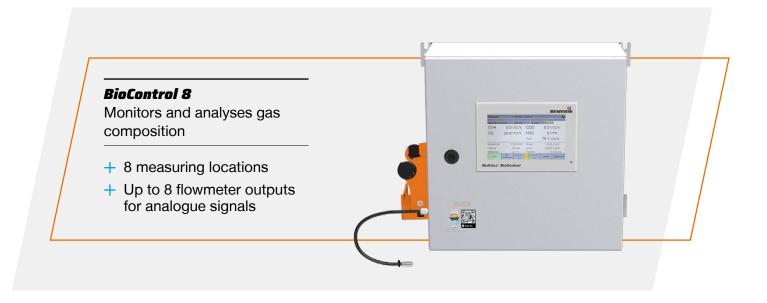
Do you run an external, gas-tight, covered fermentation residue storage? No problem! Simply remove the mobile Multitec from the base station and use it to measure the parameters on the external fermentation residue storage and save the values. As soon as you put the Multitec® back into the holder on the base station and connect, BioControl adds the values to the documentation.



Choose your device

BioControl 2 Monitors and analyses gas composition + 2 measuring locations

BioControl 4 Monitors and analyses gas composition + 4 measuring locations + Up to 4 flowmeter outputs for analogue signals



Multitec® 545

Mobile measurement of gas concentrations

- + Explosion protection
- + H₂S measuring range up to 5000 ppm CH₄, CO₂ and H₂S as standard



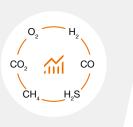


Multitec® 540

Mobile measurement of gas concentrations

- + Explosion protection
- + H₂S measuring range up to 2000 ppm CH₄ and CO₂ as standard





The icons below refer to the applications of the respective device.



Detecting



(Ex Warning



Solutions for leak detection in your biogas plant

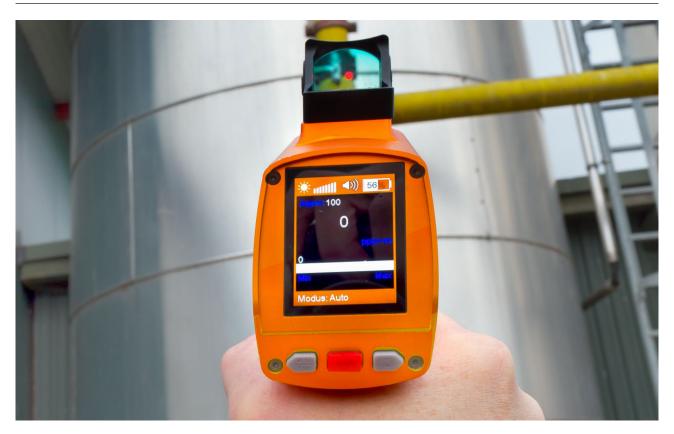
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Detect gas leaks from a distance of up to 200 m

Measuring at inaccessible locations.

SR-LD 800 | 200







- High degree of sensitivity thanks to measurement laser resolution of 2.5 ppm*m
- + Also useful for small leaks at short distances
- + Aim using the red dot sight high accuracy even at great distances and in poor lighting conditions
- + Detects methane even through window panes; for this reason the SR-LD is also suitable for on-call emergency services
- + No cross-sensitivities to other gases thanks to the TDLAS method (Tunable Diode Laser Absorption Spectroscopy)
- + Automatic, quick adjustment in the case; within 3 minutes
- + Lightweight, easy to handle and user-friendly: 954/623 g (SR-LD 800/200)
- + Takes only 2.5 hours to charge
- + Replacement battery and fast charger included



Choose your device

Range: up to 200 m + Measurement laser resolution: 2.5 ppm*m (Sensitivity mode), 5 ppm*m (Distance mode)



>> Your daily companion for working on your biogas plant Detect, warn and measure.

EX-TEC® PM 580









- + Simultaneously measure explosive gases and detect leaks Approval for operator protection
- + Locate gas leaks quickly and accurately
- Intuitive menu navigation and easy to read display
- Can be operated while wearing gloves
- + Shock-resistant and designed for harsh conditions



Scan for detailed product information:



>> It is easy to find gas leaks with this compact gas detector Detect easily and quickly.

SNOOPER mini





- + Detects gas leaks from 0 to 22,000 ppm
- + Specialised models for methane, propane or hydrogen Replaceable sensor filter for longer life
- + Quick commissioning for immediate leak detection
- + High performance at an affordable price





Scan for detailed product information:



Reliable technology. Competent support.

Gas pipe network inspection with Sewerin

Unable or unwilling to carry out pipeline inspections on your own? No matter if your top priority is safety or you simply want to meet your reporting obligation arising from the EU Methane Regulation: our highly trained and experienced specialists will gladly support you. To do this, we use state-of-the-art measuring technology to detect leaks early and ensure the integrity of your supply lines. In addition to traditional pipe network inspection, our service also includes odorant control as well as precise pipeline location, particularly when it comes to plastic pipes using the innovative SeViRO method (Sewerin Vibration Pipeline Location.





Which Multitec® BioControl model is right for your challenge? Let's talk. Our service and sales team will gladly help you choose the right device. We are also there for you during commissioning as well as afterwards.

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