

## **GAS ANALYSER**

The Gas Analyzer is engineered for accurate and continuous monitoring of gases emitted from industrial processes. Featuring a compact and modular design, it integrates advanced technologies to deliver precise measurements. This analyzer is equipped with a broad range of monitoring capabilities, making it suitable for detecting and analyzing various gases in real-time, ensuring compliance with environmental standards and optimizing process efficiency.





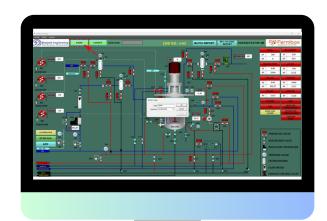
## **Application Areas**

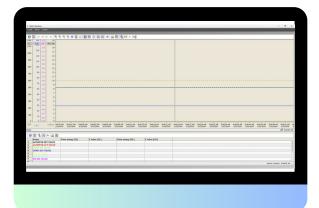
Chemical industry | Biogas production | Agriculture | Algal hydrogen production



### **General Features**

- Compact modular type
- Inbuilt sample gas handling system
- Up to six channel gas input
- Gas conditional unit (Optional)
- Analog output can be integrate with PLC
- Continuous inline measurement
- Continuous gas measurement for data logging





### **Biojenik Engineering SCADA Software**

**Biojenik Engineering's SCADA software** is designed for real-time monitoring and control, offering a range of features to improve efficiency and ensure compliance.

- Software: Siemens WinCC.
- Simulation and Auto-Tuning: Generates random process values for simulation and auto-tuning.
- Third-Party Integration: Free OPC server for third-party device integration.
- Remote Operation: Webex-based remote operation/control of setpoints.
- Customized Interface: Personalize display to show Process, Profiles, Set Points, and Cascade.
- Batch Management: Manage batches and track them using tags.
- Access Control: Different access levels for enhanced security.
- **Dosage Tracking:** Monitor and record material consumption during production.
- Real-Time Data Recording: Automatic recording and trending of setpoints and measurement values.
- Data Export: Export data to Excel for analysis and reporting.
- Data Comparison: Compare and analyze data for improved decision-making.
- Event Alarms & History: Alerts for issues, historical data access, and ANSI-18.2 compliant alarm management.
- Audit Trail: Record-keeping compliant with 21 CFR Part 11 standards.
- **Lifetime Support:** One-time license with lifelong updates and support.

#### **Benefits:**

- Simplifies process monitoring and control.
- Increases efficiency by automating tasks and tracking.
- Ensures compliance with regulatory standards.
- Provides actionable insights with data comparison and analysis.

## **Technical Specification**

Gas	Range	Typical Accuracy	Response Time (T90)
CH₄	0 - 100%	0 - 70%: ±0.5% (vol); 70 - 100%: ±1.5% (vol)	≤ 10 seconds
CO <sub>2</sub>	0 - 100%	0 - 60%: ±0.5% (vol); 60 - 100%: ±1.5% (vol)	≤ 10 seconds
O <sub>2</sub>	0 - 25%	0-25% : ±1.0% (vol)	≤ 20 seconds
H₂S	0 - 50ppm	±1.5% FS	≤ 30 seconds
H₂S	0 - 200ppm	±2.0% FS	≤ 30 seconds
H₂S	0 - 500ppm	±2.0% FS	≤ 30 seconds
H₂S	0 - 1,000ppm	±2.0% FS	≤ 30 seconds
H₂S	0 - 5,000ppm	±2.0% FS	≤ 30 seconds
H₂S	0 - 10,000ppm	±5.0% FS	≤ 30 seconds
СО	0 - 500ppm	±2.0% FS	≤ 30 seconds
СО	0 - 1,000ppm	±2.0% FS	≤ 30 seconds
СО	0 - 2,000ppm	±2.0% FS	≤ 30 seconds
CO (H <sub>2</sub> )*	0 - 2,000ppm	±1.0% FS	≤ 30 seconds
NH₃	0 - 1,000ppm	±10.0% FS	≤ 90 seconds
H <sub>2</sub>	0 - 1,000ppm	±2.5% FS	< 90 seconds

#### Note:

- All accuracies are quoted after calibration.
- Hydrogen cross-gas effect on carbon monoxide is approximately 1%. Do not use where hydrogen is in excess of 10,000 ppm.
- $\bullet$  CO  $(H_2)^*$  indicates a measurement where the hydrogen concentration is being taken into account.

# **Technical Specification**

## Biojenik O<sub>2</sub> Analyzer Series

## Biojenik CO<sub>2</sub> Analyzer Series

S.No	Specifications	Details
1	O₂ Detection Range	<ul><li>0.1 - 25%</li><li>0.1 - 100%</li></ul>
2	Measurement Accuracy	• ±0,5% of full range
3	Stability of Zero Point	• ±0,5% of range (over 12-month period)
4	Resolution Precision	• ±0.01% across range
5	Repeatability at Span	• ±1.5%
6	Response Time (T90)	• ≤4 seconds
7	Operational Temperature	• 0-200°C
8	Pressure Calibration	Calibrated to 1013 mbar
9	Power Input	15V DC (optional 24V DC for linearized version)
10	Power Consumption	• 0.6W
11	Initial Warm-Up Duration	• 2 minutes
12	Humidity Endurance	• 0 - 95% RH, non-condensing
13	Signal Output	4-20 mA (linear version for accurate data transfer)

S.No	Specifications	Details
1	CO₂ Detection Range	<ul><li>0 - 3%</li><li>0 - 10%</li></ul>
2	Measurement Accuracy	• ±3% of range
3	Stability of Zero Point	• ±3% of range (over 12 month period)
4	Repeatability at Zero	• ±0.5% of range
5	Repeatability at Span	• ±1.5%
6	Response Time (T90)	• 30 seconds
7	Operating Temperature	• 0 - 100°C
8	Pressure Calibration	Calibrated to 1013 mbar
9	Power Input	• 15V DC (optional 24V DC for linearized version)
10	Power Consumption	• 0.6W
11	Initial Warm-Up Duration	• 5 minutes
12	Humidity Endurance	• 0 - 95% RH, non-condensing
13	Signal Output	• 4-20 mA (linear version for accurate data transfer)

#### **Our Valuable Clients**

#### **S**Biocon Fermbox FEDMENTING THE FITTING































### **Biojenik Engineering Services**

We offer a comprehensive range of services to ensure the smooth operation and longevity of your systems:















**Technical** Customized Engineering Support & Solutions Troubleshooting



Warranty

Services

AMC &

CMC Services

Relocation & Retrofitting Services



Rapid Replacement **Parts Delivery** 



24x7 Customer Support

#### **Our Certifications**













# Connect with us...

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