

## ETG MCA 100 BIO-P

Portable Multi-Component Biogas Analyzer

The ETG MCA 100 BIO-P is the ideal solution for portable gas analysis and is specially designed for use in Biogas Plants.

### Description

The **ETG MCA 100 BIO-P** is a complete portable solution to meet the requirement of measuring gases in a biogas plant. It's designed for ease of use, simplicity of maintenance, and the ultimate in reliability.

Unlike other analyzers, the ETG MCA 100 BIO-P utilizes non-dispersive infrared (NDIR) technology to measure multiple gases with a single optical path. When measuring methane as a biofuel, single-gas analyzers are inadequate due to interference from large amounts of CO present. The ETG MCA 100 BIO-P measures CO<sub>2</sub>, CO, O<sub>2</sub>, and H<sub>2</sub>S, in addition to methane thereby providing the optimal combination of gases for combustion optimization.

The advanced optics and electronics of the ETG MCA 100 BIO-P NDIR analyzer virtually eliminate zero drift after the initial warm-up period. Temperature and pressure compensation eliminate the main causes of calibration drift typical of many NDIR instruments.

The Biogas portable probe is designed to measure temperature and pressure and is fitted with an inline filter.

### Features and Benefits:

- > Measurement of CO<sub>2</sub>, CH<sub>4</sub>, O<sub>2</sub>, & H<sub>2</sub>S
- > Automatic Calibration
- > Intelligent Processor with Touch Screen Monitor for Control
- > Data downloadable on USB Flash Drive
- > Low maintenance – high reliability



### APPLICATIONS

- > Biogas Plants
- > Upstream and downstream of treatment systems

### MONITORING SOLUTIONS

Complete source for all your Continuous Emissions Monitoring (CEMS) needs:

- > Both Dilution and Extraction CEMS systems
- > Data Acquisition Systems (DAS)
- > Flow Monitoring
- > Opacity Monitoring
- > Oxygen Monitoring Systems
- > Particulate (PM) Monitoring
- > Process Monitoring Systems



*MCA 100 BIO-P touchscreen interface*

Gas	Measurement Method	Resolution	Range	Accuracy	Precision	Time
Methane (CH <sub>4</sub> )	NDIR	0.01%	0-100% 201 ppm-40% 40-80% 80-100%	±1% F.S. ±2% rel. ±1% rel. ±5% rel.	±0.8%	T <sub>90</sub> & T <sub>10</sub> <10s
Carbon Dioxide (CO <sub>2</sub> )	NDIR	0.01%	0-50% 0.0-16.0% 16-20%	±0.8% F.S ±0.3% abs. or rel. ±5% rel.	±0.7% ±0.1% abs. or ±0.8% rel.	T <sub>90</sub> & T <sub>10</sub> <10s
Oxygen (O <sub>2</sub> )	Electrochemical	0.01%	1.01-25.00%	±0.1% abs. or ±3.0% rel.	±0.1% abs. or ±1.5% rel.	<40s from ambient to 0.15% O <sub>2</sub>
Hydrogen Sulfide (H <sub>2</sub> S) - Biogas	Electrochemical	1 ppm	0-500 ppm 0-2,000 ppm 0-5,000 ppm 0-10,000 ppm	±5ppm abs. or ±3.0% rel.	±5ppm abs. or ±3.0% rel.	T <sub>90</sub> & T <sub>10</sub> <20s

## SPECIFICATIONS

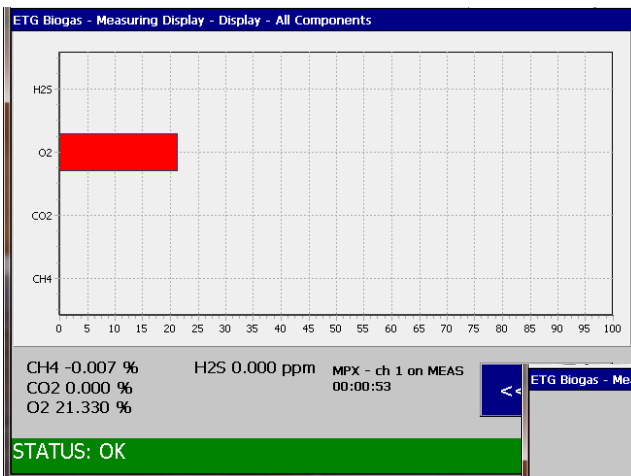
<b>Response Time</b>	Specified at a sample flow rate of 1 lpm through MCA sample cell
<b>Data Refresh Rate</b>	1 sec.
<b>Warm-up Time</b>	30 sec. ready, 3 min. useable, 30 min. to full performance
<b>Operating Temp.</b>	0°C to 70°C (32° to 158° F)
<b>Operating Humidity</b>	To 95% RH (non-condensing)
<b>Operating Altitude</b>	-1 to 10,000 ft.
<b>Communications</b>	USB Port (Standard)

## CONTACT

Sales  
908-500-4010  
sales@monsol.com

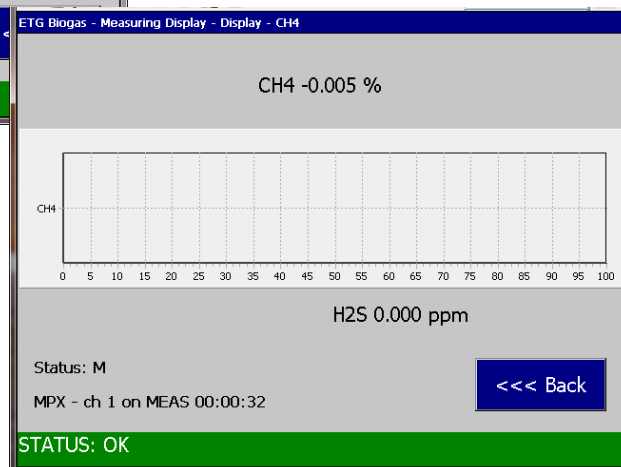
Indianapolis  
4404 Guion Road  
Indianapolis, IN 46254  
Phone: 317-856-9400

<b>Case Protection</b>	IP67 (1m submersion for 30 minutes), Def stan 81-41/STANAG 4280
<b>Battery</b>	12 VDC with internal charger and light charge indicator
<b>Monitor</b>	Touch Screen 5.7" resistive type
<b>Calibration</b>	Zero & span user selectable. Automatic calibration (optional)
<b>External Electrical Supply</b>	From 100 to 240 VAC, 47-63 Hz
<b>Pneumatic Connection</b>	Rapid fittings 6.0 OD x 4.0 ID
<b>Options</b>	Humidity sensor, N <sub>2</sub> calculation, flow measurement, H <sub>2</sub> measurement
<b>Weight</b>	2.5 kg



The ETG MCA 100 BIO-P has Remote Support and Remote Access with:

- File Transfer
- Data Monitoring by your PC, Tablet or Smartphone
- Software Upgrades



Display includes Bar  
Graphs, Trending, and  
Digital Display.

**CONTACT**

Sales  
908-500-4010  
sales@monsol.com

Indianapolis  
4404 Guion Road  
Indianapolis, IN 46254  
Phone: 317-856-9400