# ETG BIOGAS ANALYZERS

PRODUCT LINE

a reliable partner in gas analysis



### $CH_4 - CO_2 - O_2 - H_2S$

#### MONITORING

#### FOR APPLICATIONS:

Biogas Plants Research Center Water Treatment Plant Biogas System Integrator Biomethane Upgrading

#### **MAIN FEATURES**

- NDIR Technology for CO<sub>2</sub> and CH<sub>4</sub>
- O, and H,S measured by ECD cells
- Automatic air purge for long life  $H_2S$  ECD cell
- (optional NDUV sensor for  $H_2S$  maintenance free)
- Wall Mounted Version (IP65)
- Arm Processor
- Touch Screen monitor
- Ethernet and USB Remoting
- Analog (4...20mA) & digital (PNP) Signal Output
- Modbus, Profibus, Ethernet (optional) and others
- Highly modular & High performance
- Temperature controlled internally
- · Ideal for the Plant
- Plug & Play
- Flow regulation
- Customizable
- Condensate Removal System (optional)
- Multipoint Sampling system (optional)
- · Very little sample required
- · Low cost of ownership
- Totally developed in Italy

# ETG 6500 BIO WM

### Multicomponent gas analyzer for Biogas



The ETG 6500 series of gas analyzers by ETG are the ideal solution for Biogas/Biomethane updgrading measurement because of their accuracy, stability, reliability, broad measurement range, and the variety of available form factors. Unlike other analyzers, ETG 6500 non-dispersive infrared (NDIR) sensor can measure multiple gases in a single instrument, using only one optical path platform. ETG analyzers have the ability to measure  $CO_2$ ,  $H_2S$  and  $O_2$  in addition to methane, providing the optimal combination of gases measurement for Biogas/Biomethane plants. We can measure  $H_2S$  using NDUV technology, which is maintenance free and does not need the replacement of Electrochemical cells. The enhanced optics and electronics of our NDIR analyzers have virtually eliminated zero drift after the initial warm up period. The temperature and pressure compensation eliminates the major causes of span drift in many NDIR instruments.

## ETG MCA 100 BIO P

Portable multicomponent gas analyzer for Biogas



The MCA 100 Bio series of gas analyzers by ETG are the ideal solution for Biogas measurement and industrial combustion applications, because of their accuracy, stability, reliability, broad measurement range, and the variety of available form factors. Unlike other analyzers, ETG MCA 100 non-dispersive infrared (NDIR) sensor can measure multiple gases in a single instrument, using only one optical path platform. Single-gas analyzers are inadequate when using methane as a bio-fuel, because the gas often contains large amounts of  $CO_2$  as a contaminant. ETG analyzers have the ability to measure  $CO_2$ ,  $H_2S$ and O<sub>2</sub> in addition to methane, providing the optimal combination of gases analysis for Biogas/Biomethane process. The enhanced optics and electronics of our NDIR analyzers have virtually eliminated zero drift after the initial warm up compensation temperature and period. The pressure eliminates the major causes of span drift in many NDIR instruments.

#### **MAIN FEATURES**

- NDIR Technology for CO<sub>2</sub> and CH<sub>4</sub>
- Additional measurements of: NH<sub>3</sub>, H<sub>2</sub>, Energy Calculation (optional)
- Portable Version
- 8 hours of battery life
- Arm Processor
- Touch Screen monitor
- Wi-Fi and USB Remoting
- Internal Sample Pump
- Low cost of ownership
- Friendly interface
- Ideal for multiple checking
- · Loadable on the airplane
- Data downloadable on USB Pen Drive
- Easy calibrations
- Rapid Fittings
- High Performances
- Impact-resistant housing
- Totally developed in Italy
- Usable under power supply (when battery is low)

#### FOR APPLICATIONS:

Biogas Plants Research Center Water Treatment Plant Biogas System Integrator Biomethane Upgrading

### $CH_4 - CO_2 - O_2 - H_2S$

MONITORING

# ETG 8900 BIO LNG

Multicomponent gas analyzer for Biomethane



#### H<sub>2</sub>O and CO<sub>2</sub> MONITORING

#### FOR APPLICATIONS:

Biogas Plants Research Center LNG plant Biogas System Integrator Biomethane Upgrading

#### **MAIN FEATURES**

- Wall Mounted Version (IP65)
- Data downloadable on USB Pen Drive
- Arm processor
- Touch Screen monitor
- Ethernet, Wi-Fi and USB Remoting
- · Low cost of ownership
- Friendly interface
- Highly modular
- Easy calibrations
- · Ideal for process monitoring
- Highly performances
- Totally developed in Italy

The ETG 6900 BIO LNG gas analyzer is developed with the aim of providing a simple and reliable solution for the liquefying processes. Thanks to the photoacoustic technology, it is capable of providing stable measurement results, which makes it ideal for a continuous monitoring of the process. ETG 6900 BIO LNG, thanks to its design, which let the gases flow separately from the sensors, requires very little maintenance operations, guaranteeing a long components operating life and minimizing value drifting over time.

### OUR DISTRIBUTORS

After years of achievements, we have distributors covering most of the countries of the world and we are constantly expanding.



#### Get in touch...



- https://www.etgrisorse.com
- Via Baione 2/K, 10034 Chivasso (TO) ITALY
- +39 011.192.708.90
- infoetg@etgrisorse.com

TG Risorse e Tecnologia, thanks to the experience accumulated in almost 30 years of gas analysis, has established numerous collaborations with leading companies in the sector and universities from all over Europe.

ETG is able to provide suitable solutions for each production plant, treatment and storage of Biogas, Biomethane, Syngas, and more. In a period of strong technological advancement and an ever-increasing attention to environmental protection, ETG is constantly working on the development of new solutions.

Regarding the analysis of Biogas and Biomethane, it is known that one of the biggest problems is the measurement of Hydrogen Sulphide. Most analyzers Use electrochemical cell systems (ECD) which, despite a very low price, require constant maintenance and cannot measure concentrations continuously. This makes very difficult to accurately monitor concentrations, also burdening the end user with maintenance costs and times. Thanks to NDUV (Non-Dispersive Ultra Violet) technology, ETG is now able to provide a reliable solution. capable of continuous measurement, that requires very little maintenance, and most importantly lasts over time. ETG has recently developed a system able to measure the concentrations of humidity and CO<sub>2</sub> in biomethane, before the liquefaction process. Thanks to the photoacoustic technology, of which ETG is the only manufacturer in Italy, it is possible to monitor these two critical issues, in order to significantly reduce the risk of making the process inefficient, or damaging the expensive equipment required.