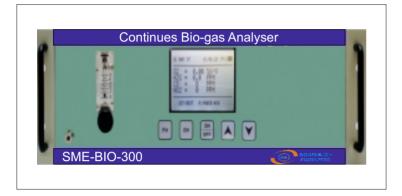
## **CONTINUES BIO-GAS ANALYZER**

### (MICROPROCESSOR BASED)

# A COMPACT RUGGED & INTELLIGENT INSTRUMENT FOR ANALYSIS OF PROCESS GASES IN BIOGAS PLANTS CH4, CO2, H2S & O2





SME-BIO-300 SME-BIO-300

A continuous surveillance of the produced biogas is necessary to efficiently control the production process of a biogas plant. Methane, Residual oxygen, carbon dioxide & hydrogen sulphide in the gas stream can be measured simultaneously or singularly.

Its simple automatic operation, continuous measurement and digital display of gas and makes it a valuable aid for on-site instant analysis and follow up action. Its data logging & the computer interface facility is helpful for further detailed analysis in laboratory.

#### **APPLICATIONS**

- Process surveillance of the fermentation of biogas.
- Optimization of the calorific value.
- Protection of the gas turbines from high- hydrogen sulphide concentrations.
- Differing customer specific measuring- requirements upon request.

#### SPECIAL FEATURES

- Complete automatic operation.
- Self diagnostic check.
- Application specific sensor technologies.
- Continuous, stable alphanumeric display.
- Data logging and RS 232 output capability.

#### **OPERATIONS**

- Electrochemical sensor for O2.
- Extra long life oxygen sensor not Poisoned with Co2.
- Data logging and built in printer.
- Date & time stamp.
- Custom designed sample Conditioning system.
- Analog / Digital Output.

#### **SPECIFICATIONS**

Display : 320 x 260 Graphics LCD

Power Supply : 100 - 290 VAC / 47 - 63 Hz

Ambient Supply : 0 - 50 Deg. C

Enclosure : Aluminium Casing (Power Coated) for Indoor Application

Mounting : Panel Mounted - Standard : 19" Rack Mounted

Field Mounted - ATS 208A : 250 X 200 X 100 mm

ATS-208AEx : 265 X 245 X 166 mm

Warmup Time : 10 Minutes

Output : 4-20mA / Analog / Digital RS 232

Alarm : Two Level (Selectable Range)

Sample Gas Condition : Temp : 0 - 50 Deg. C

Pressure: Less than 1.5Kg/cm

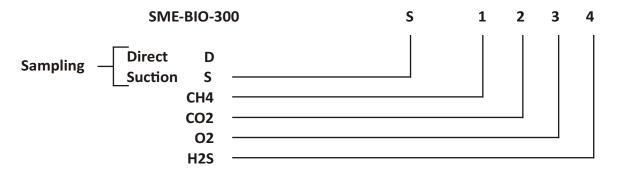
The Gas should be Dry & Clean. Other than this Suitable Sample

Calibration : Manual, Automatic with Certified Samples.

#### **MEASURING RANGE**

PARAMETER	SENSOR	RANGE (Nom / Max.)	RESOLUTION	ACCURACY
METHANE (CH4)	TCD / IR	0-100 %	0.1 %	0.5 %
CARBON DIOXIDE (CO2)	TCD / IR	0-50 %	0.1 %	0.5 %
OXYGEN (O2)	EC	0-25 %	0.1 %	0.5 %
HYDROGEN SULPHIDE (H2S)	EC	0-1000 / 10,000 PPM	1 PPM	0.5 %

#### **BENEFITS**



Note: Specifications and Features will vary with application. The above are established and validated during design, but are not to be construed as test criteria for every product. Due to Applied's commitment to research, design and product improvement, specifications are subject to change without notice.