

# Portable Biogas Analyzer BIO-400

## I. Introduction

The Portable BIO-400 adopts the imported gas sensor by electrochemical sensor of oxygen and hydrogen sulphide, methane and carbon dioxide measured by non dispersive infrared gas sensor NDIR principle.

## II. Features

- Using 5" TFT LCD touch screen
- Measurement value display/real-time curve display
- Aluminum enclosure with smart dimensions (270\*215\*136mm, 3kgs)
- Data record, interval time adjustment, USB output to display history data
- Power intelligent management protect gas analyzer working at low battery
- Calibration menu and alarm setting with password protection
- One set back to factory setting

## III. Specifications

Measurement	CH <sub>4</sub> , CO <sub>2</sub> , O <sub>2</sub> , H <sub>2</sub> S (extendable to CO,H <sub>2</sub> )
Technology	CH <sub>4</sub> , CO <sub>2</sub> : proprietary dual beam NDIR detectors O <sub>2</sub> ,H <sub>2</sub> S: industrial electrochemical cell
Ranges	CH <sub>4</sub> : 0-100%, CO <sub>2</sub> : 0-50%, O <sub>2</sub> : 0-25%, H <sub>2</sub> S:0-9999ppm Other ranges customizable on request without price increase
Resolution	0,01% for CH <sub>4</sub> , CO <sub>2</sub> , O <sub>2</sub> ; 1ppm for H <sub>2</sub> S
Accuracy	CO <sub>2</sub> /CH <sub>4</sub> /O <sub>2</sub> : 0.01%; H <sub>2</sub> S: 1ppm
Repeatability	CO <sub>2</sub> /CH <sub>4</sub> /H <sub>2</sub> S/O <sub>2</sub> : ≤1%FS
Gas conditions at analyzer inlet	Flow:0.7L-1.2/min, internal gas sampling pump Pressure:2kPa≤ inlet pressure≤ 50kPa Quality: No dust, moisture, tar (external safety filter and optional gas washing unit)
Operating conditions	Tamb : -5°C to 50°C / Pamb : 86 to 108 kPa / RH : 0-90% non-condensing
Response time (T90)	≤ 15 sec (NDIR)
Communication interface	USB output; RS232/RS485
Power supply	External 220 VAC-50Hz Internal with lithium battery and charger
Dimensions and weight	Gas analyser :270(L) x 215 (H) x 136 (W) mm / ± 3kg

## IV. Applications

- Landfill
- Sewage treatment
- Anaerobic digestion
- CDM projects
- Medium and large size biogas power plant

**TENHO**

