

# BIO-400-S-PANEL

## Biogas Analyser - Panel



**AMBETRONICS**  
AN ISO 9001:2015 CERTIFIED COMPANY



Actual image and size may slightly differ

### Features

- Infrared sensor technology design & developed in India
- Digital display of CH<sub>4</sub>, CO<sub>2</sub>, O<sub>2</sub>, H<sub>2</sub>S Concentration on the graphic LCD display with backlight
- Dew Point sensor, NH<sub>3</sub>, CO & H<sub>2</sub> Gas as per requirement (Optional)
- Plug-in Sensor provides a full year of warranted protection against hazardous gases
- Calibration due indication and alert
- User friendly, programming with 3 keys
- Password protected function menu
- LOW & HIGH configurable alarms with LED indications.
- Software calibration totally by using front keys
- Data Logging facility with 1,00,000 records & visible in ASCII format while downloading to PC via USB interface (in Excel format)
- Self purging technology via 2 keys press
- Optional Calibration Kit

### Applications

- Greenhouse gas measurement
- Biogas plant (Purified Gas / Raw Gas)
- Farm digester gas monitoring
- Food processing biogas monitoring
- Waste water biogas monitoring
- Methane recovery

## TECHNICAL SPECIFICATIONS

### General Specification

Detection Method	: Suction/pressurised (depend on application)
Display	: 3 keys LCD with settable backlight
Set Point	: Two independent set points, AL1 & AL2 with LED indication facility only
Setting	: Setting by 3 keys on front panel i.e. (SET, SHIFT/ACK, INCR) for Alarm Violation
Response Time	: Less than 30 seconds
Warm-up Time	: 60 seconds

### Sensor Range/Resolution/Accuracy max (Indication/FS)

Sensor Technology1	Range	Resolution	Accuracy
CH <sub>4</sub> (NDIR)	0-100.0% V/V	0.1	±2%
CO <sub>2</sub> (NDIR)	0-100.0% V/V	0.1	±2%
O <sub>2</sub> (Electrochemical)	0-25.00% V/V	0.01	±1%
H <sub>2</sub> (Electrochemical)	0-2000 PPM	1	±2%
*NH <sub>3</sub> (Electrochemical)	0-1000 PPM	1	±2%
* H <sub>2</sub> (Electrochemical)	0-2000 PPM	1	±2%
*CO (Electrochemical)	0-1000 PPM	1	±2%
*Dew Point Sensor	PPM / °C	-	-

(Note : \* - Optional)

- Other than above mentioned ranges please contact to our factory
- For better accuracy sample should be DRY & CLEAN GAS.
- Accuracy measured as per calibration cylinder.
- For Dew Point Range & Accuracy please contact to our factory.

### Electrical

Supply Voltage : 230 VAC ± 10%

### Output Signal

Download	: 100000 records Logging capacity with data can be visible in ASCII format while downloading in the PC & Through USB/Bluetooth interface RS - 485 MODBUS RTU
Setting	: Over / Open Range indication on LCD
Output	: • 2 Relay outputs for LOW & HIGH alarm • RS-485 MODBUS RTU output

### Environmental

Operating Temp.	: 0 to 50°C	Atmospheric pressure : 700 mbar to 1200 mbar
Storage Temp.	: 0 to 60°C	
Humidity	: Below 95% RH, Non condensing (40% to 60% RH recommended)	

### Free Accessories

- Operating Manual
- Consist of 2 way Valve built in sample pump, Filters, Flow meter, Solenoid Valve, with isolations in supply.

### Enclosure Details

Cabinet Material	: MS
Size (external)	: 600 mm (L) x 600 mm (H) x 400 mm (D)
Weight	: 40 kg max

Manufactured by :



**AMBETRONICS ENGINEERS PVT. LTD.**

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Version BIO-400-S-PANEL-R3-29-072023

Specifications subject to change without any prior notice