# **Dual Channel Portable Gas Detector**



#### **Diffusion Type**



# **Features**

- Plug-in Sensor provides a full year of warranted protection against hazardous gases
- · The Portable Detector detects smallest gas leak on service line and joints
- Easy handling and programming with 3 keys and one key for power ON/OFF
- Easy Software calibration using front keys
  - Password protected function menu
- Digital display of Gas Concentration in %V/V or %LEL or PPM on LCD with backlight
- LOW, HIGH, TWA & STEL configurable alarms with buzzer, vibrator alerts & LED indications with multi-color display.
- Optional Data logging & Downloading facility. Downloaded data available in ASCII Format (Max: 50,000 records)
- Battery status indication on the LCD with battery charging LED indication and LOW BAT indication with Buzzer Beep sound
- · "Calibration due" indication and alert
- "Sensor Open / Over" range indication
- · Power supply with rechargeable battery
- · Small, compact and light-weight

# **Applications**

- · Emergency response to gas leak
- · Equipment maintenance
- Waste water treatment plants
- Steel mills
- Personal Monitoring

- Incoming Cylinder inspection
- · Pre entry check quality control Process
- Pulp & Paper Industry
- Ambient monitoring
- Refineries & Petrochemical plant including offshore drilling and plant shutdowns

### **TECHNICAL SPECIFICATIONS**

#### **GENERAL**

'Actual image and size may slightly differ

Sensors : Electrochemical / NDIR
Range/Resolution : As specified in the table
Detection Method : Diffusion/ Suction
Response time : Less than 10 Sec

Parameter Setting : Setting by 3 keys i.e. (SET, SHIFT, INCR)
Alarm Set Point : Two independent set points, AL1 & AL2

with LED indication

Alarm Violations & : Setable display

: Indicated by Integrated Vibrator & Buzzer (85dB Audible from 1 feet)

Display : 2-line LCD with backlight tri-color

Red/Green/Blue

#### **ACCURACY**

Sr. No.	Sensor Technology	Calibration Accuracy		
1	Electrochemical	± 2 % FS		
2	NDIR - CH4	$\pm$ 0.2 % V/V OR $\pm$ 5% of applied gas whichever is max		
3	NDIR - CO2	± 10 % of applied gas		

#### **ENVIRONMENTAL**

Operating Temp. : -10°C to +55°C Storage Temp. : -10°C to +60°C

Humidity : Below 95% RH, Non condensing

#### **ELECTRICAL: 3.7V LI-PO RECHARGEABLE BATTERY**

BACK UP DETAILS				
Sr. No.	Gas 1	Gas 2	W/O VIOLATION	WITH VIOLATION
1	Toxic	02 / N2	10 DAYS	25 HOURS
2	Toxic	Toxic	12 DAYS	48 HOURS
3	NDIR	Toxic / 02 / N2	10 DAYS	25 HOURS

#### **COMMON DELIVERABLES**

- · Test calibration certificate
- · Reference calibration gas certificate
- User Manual
- AC Charger Adaptor
- Protection cover
- USB cable (only for data logging option)
- Calibration Cap for Diffusion type

#### **OPTIONAL DATA LOGGING**

Logging Capacity : 50,000 records with data available in ASCII format

Data Download : In PC Through USB interface using Terminal software

#### **DIMENSIONS & WEIGHT**

Material : ABS Plastic

Size : 140mm(H) x 70mm(W) x 41 mm(D)

Weight : 200 grams max

# **LIST OF AVAILABLE GASES WITH RANGE & RESOLUTION**

### **ELECTROCHEMICAL SENSOR TECHNOLOGY**

SR.NO.	GASES	RANGE	UNIT	RES.
01	Oxygen (O <sub>2</sub> )	25	% Vol.	0.01
Nt1	Nitrogen (N2)	75 TO 100	%Vol.	0.1
	TOXIC GASES			
T1	Ammonia (NH <sub>3</sub> )	100	PPM	1
T2	Ammonia (NH <sub>3</sub> )	1000	PPM	1
Т3	Bromine (Br <sub>2</sub> )	10	PPM	0.01
T4	Carbon Monoxide (CO)	1000	PPM	1
T5	Carbon Monoxide (CO)	2000	PPM	1
Т6	Chlorine (CL <sub>2</sub> )	20	PPM	0.01
T7	Hydrogen (H <sub>2</sub> )	2000	PPM	1
T8	Hydrogen Bromide(HB <sub>r</sub> )	100	PPM	1
<b>T</b> 9	Hydrogen Chloride (HCL)	100	PPM	1

SR.NO.	GASES	RANGE	UNIT	RES.	
	TOXIC GASES				
T10	Hydrogen Cyanide (HCN)	100	PPM	1	
T11	Hydrogen Fluoride (HF)	10	PPM	0.01	
T12	Hydrogen Fluoride (HF)	100	PPM	1	
T13	Hydrogen Sulfide (H <sub>2</sub> S)	100	PPM	1	
T14	Ozone (O <sub>3</sub> )	20	PPM	0.01	
T15	Phosphine (PH <sub>3</sub> )	10	PPM	0.01	
T16	Nitrogen Dioxide (NO <sub>2</sub> )	20	PPM	0.01	
T17	Sulphur Dioxide (SO <sub>2</sub> )	50	PPM	0.1	
T18	Sulphur Dioxide (So <sub>2</sub> )	2000	PPM	1	

### **NDIR SENSOR TECHNOLOGY**

SR. NO.	GASES	RANGE	UNIT	RES.
N4	Methane (CH₄)	5	% V/V	1
N5	Methane (CH₄)	100	% <b>V</b> /V	0.1
N6	Methane (CH <sub>4</sub> )	100	% LEL	1
N7	Carbon Dioxide (CO <sub>2</sub> )	5000	PPM	1
N8	Carbon Dioxide (CO <sub>2</sub> )	2000	PPM	1
N9	Carbon Dioxide (CO <sub>2</sub> )	10	%V/V	1

#### Note:

- In above Table, Range of gases start from zero.
- · Gases which are not listed, are available on request & for other details contact factory.

### **ORDERING INFORMATION**

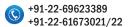
				_	GAS NUMBER. RANGE. RESOLUTION
MODEL NO		DETECTION METHOD	DATA LOGGING OPTION		GAS NUMBER, RANGE, RESOLUTION
MODEL NO		DETECTION METHOD	DAIA LOGGING OF HON		
PG - 200		1) D = Diffusion	1) L = Data Logging		Refer Gas List
	1			_	

Example: Select order code e.g. PG-200-DL-T14 & NT1 i.e. PG-200 - DIFFUSION & DATA LOGGING - H2S 100 PPM & Nitrogen 75 % TO 100 % V/V

Manufactured by:



17-B, 16, 14A, Tarun Industrial Estate, New Nagardas Road, Mogra Pada, Andheri (E.) Mumbai - 400 069, India.



+91-93207 37646 +91-91674 18106

sales8@ambetronics.com sales11@ambetronics.com Follow us on



Version: PG-200-D-R11-28-07-2023