# BGD-6033-FLP

# **Battery Powered Gas Detector**



# **TECHNICAL SPECIFICATIONS**

| GENERAL                 |   |  |
|-------------------------|---|--|
| Sensors                 | : | Electrochemical/NDIR   |
| Range/Resolution        | : | As specified in the table  |
| <b>Detection Method</b> | : | Diffusion  |
| Response Time           | : | Less than 10 Sec   |
| Set Point               | : | Two independent set point, with alarm symbol for indication purpose.(There is no relay output) |
| Setting                 | : | By using Magnetic Wand for Flameproof Model.   |
| Display                 | : | 2 Line, 4-Digit Segmental L.C.D. Display.  |
|                         |   |  |

#### ACCURACY

| <b>FI FCTRICAI</b>   |   |
|----------------------|---|
| NDIR CH <sub>4</sub> | : $\pm 0.2\%$ V/V or $\pm$ 5% of Applied Gas. |
| Toxic/0 <sub>2</sub> | : ±2% of the full Scale Range.                |
|                      |   |

- ELECTRICAL
- 3.7 Lithium-Ion Rechargeable Battery
- 1 year back-up

#### **ERROR MONITORING**

- During Sensor break/ open, Display shows 'OPEN'.
- During Over Range, Display shows 'OVER'.

# AN ISO 9001:2015 CERTIFIED Features

- Easy Programming with Password Protection.
- Fast Response, Easy to Read Display.
- Reverse Polarity Protection for Battery connection.
- No Additional Power Required.
- Highly Reliable, Fast, Accurate for Specific Gas Detection.
- Excellent Long Term Stability.
- User Friendly, Simple to Operate & Easy to Install.
- Reduced Operating, Maintenance and Installation Cost, One Man Calibration.
- Sensor Open / Over Range Indication.

# Applications

- Gas Metering Skid
- Gas Cylinder Bank
- Oil & Gas Industries
- Gas Pipeline Projects
- Refineries
- Cold Storage
- Sewage Plants
- Fertilizers Plants
- Stack Monitoring
- Chlorination Plant
- Ambient Monitoring
- Gas Metering Station Burner / Furnace Areas
- Chemical Processing Plant
- Acid Alkalize & Dyes mfg. Plants
- Offshore Drilling & Processing Platform
- Heat Treatment Plants
- Chemical Storage Area
- Control Atmosphere
- Power & industrial Plants
- Coal Mine and Confined Area
- Chemical & Petrochemical Plants
  - Automotive industrial / Plants Shops
- Pulp & Paper plants
- Bullets Yards / Storage Yard

**MUST FOR HUMAN & INDUSTRIAL SAFETY** 

Applicati

## **Technical Specifications**

#### **ENVIRONMENTAL**

Operating Temp.: -15°C to +55°CStorage Temp.: -10°C to +60°C

#### **OPTIONAL ACCESSORIES**

- · Gas sampling & conditioning system
- Canopy & Mounting stand

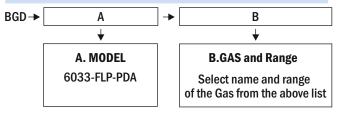
## FLAMEPROOF HOUSING

| Protection class | : | IP-66  |
|------------------|---|--|
| Cabinet material | : | Cast aluminium alloy, LM-6   |
| Dimension        | : | 197.5 mm(H) with sensor holder 170mm(W) with two stopper plugs 125 mm(D) |
| Mounting         | : | Wall Mounting/ Stand Mounting / Pipe Mounting                            |
| Weight           | : | Approximately 2.5 kg   |

### 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**



NOTE : Select order code e.g. BGD-6033-FLP-PDA-T6 i.e. BGD-6033-Flameproof Enclosure - Chlorine 10 PPM

| ELECTROCHEMICAL SENSOR TECHNOLOGY |                                     |           |      |      |  |  |  |  |  |
|-----------------------------------|-------------------------------------|-----------|------|------|--|--|--|--|--|
| Sr. No.                           | GASES                               | RANGE     | UNIT | RES. |  |  |  |  |  |
| 01                                | Oxygen (O <sub>2</sub> )            | 25        | %V/V | 0.01 |  |  |  |  |  |
| NT1                               | Nitrogen (N <sub>2</sub> )          | 75 to 100 | %V/V | 0.1  |  |  |  |  |  |
| TOXIC GASES                       |                                     |           |      |      |  |  |  |  |  |
| T1                                | Ammonia (NH <sub>3</sub> )          | 100       | PPM  | 1    |  |  |  |  |  |
| T2                                | Ammonia (NH <sub>3</sub> )          | 1000      | PPM  | 1    |  |  |  |  |  |
| ТЗ                                | Bromine (Br <sub>2</sub> )          | 10        | PPM  | 0.01 |  |  |  |  |  |
| T4                                | Carbon Monoxide (CO)                | 1000      | PPM  | 1    |  |  |  |  |  |
| T5                                | Carbon Monoxide (CO)                | 2000      | PPM  | 1    |  |  |  |  |  |
| T6                                | Chlorine (CL <sub>2</sub> )         | 10        | PPM  | 0.01 |  |  |  |  |  |
| T7                                | Ethlene Oxide (ETO)                 | 100       | PPM  | 1    |  |  |  |  |  |
| T8                                | Hydrogen (H <sub>2</sub> )          | 2000      | PPM  | 1    |  |  |  |  |  |
| Т9                                | Hydrogen Bromide (HBr)              | 100       | PPM  | 1    |  |  |  |  |  |
| T10                               | Hydrogen Chloride (HCL)             | 100       | PPM  | 1    |  |  |  |  |  |
| T11                               | Hydrogen Cyanide (HCN)              | 100       | PPM  | 1    |  |  |  |  |  |
| T12                               | Hydrogen Fluoride (HF)              | 10        | PPM  | 0.01 |  |  |  |  |  |
| T13                               | Hydrogen Fluoride (HF)              | 100       | PPM  | 1    |  |  |  |  |  |
| T14                               | Hydrogen Sulfide (H <sub>2</sub> S) | 100       | PPM  | 1    |  |  |  |  |  |
| T15                               | Ozone (O <sub>3</sub> )             | 20        | PPM  | 0.01 |  |  |  |  |  |
| T16                               | Phosphine (PH <sub>3</sub> )        | 10        | PPM  | 0.01 |  |  |  |  |  |
| T17                               | Nitrogen Dioxide (NO <sub>2</sub> ) | 20        | PPM  | 0.01 |  |  |  |  |  |
| T18                               | Nitric Oxide (NO)                   | 250       | PPM  | 1    |  |  |  |  |  |
| T19                               | Sulphur Dioxide (SO <sub>2</sub> )  | 50        | PPM  | 0.1  |  |  |  |  |  |
| T20                               | Sulphur Dioxide (SO <sub>2</sub> )  | 2000      | PPM  | 1    |  |  |  |  |  |
| NDIR SENSOR TECHNOLOGY            |                                     |           |      |      |  |  |  |  |  |
| N4                                | Methane (CH <sub>4</sub> )          | 100       | %LEL | 1    |  |  |  |  |  |

**GAS WITH RANGE & RESOLUTION** 

