

# Landfill Gas Monitor



## **Landtec GEM™ 2000 PLUS**

The GEM™2000 is designed and field proven to monitor landfill gas extraction systems accurately and efficiently. The GEM™2000 PLUS offers all the advantages and capabilities of the GEM™2000. Utilizing new technology the GEM™2000 PLUS adds the enhanced ability to read carbon monoxide and hydrogen sulfide.

### **FEATURES**

- Measures CO & H<sub>2</sub>S gases
- Measures % CH<sub>4</sub>, CO<sub>2</sub> and O<sub>2</sub> volume, static pressure and differential pressure
- Calculates balance gas, flow (SCFM) and calorific value (KW or BTU)
- Displays % LEL of CH<sub>4</sub>, Peak CH<sub>4</sub> and user-defined comments
- · Records site and well conditions
- Extended operation (10-14 hours use from one charge)
- · Accepts protocols
- Two instruments in one (GA and GEM mode)

#### **APPLICATIONS**

- · Gas Extraction Wells
- Landfills
- Flare Monitoring
- · Biogas Sites



Landtec GEM 2000 PLUS Rental

### **SPECIFICATIONS**

Gases Measured:  $CO_2$ ,  $CH_4$ , by dual wavelength infrared cell with reference channel.  $O_2$ ,  $H_2S$ , CO (Hydrogen compensated) by internal electrochemical cell.

| RANGE                                 |                                 | GAS ACCURACY     | CH₄   | CO <sub>2</sub> | $O_2$ |
|---------------------------------------|---------------------------------|------------------|-------|-----------------|-------|
| <b>O<sub>2</sub></b> 0-25%            | CO <sub>2</sub> 0-100% Reading  | 0-5%             | ±0.5% | ±0.5%           | ±1.0% |
| <b>CH</b> <sub>4</sub> 0-100% Reading | <b>H<sub>2</sub>S</b> 0-200 ppm | 5-15%            | ±1.0% | ±1.0%           | ±1.0% |
| <b>CO</b> 0-2000 ppm                  |                                 | 15% – Full Scale | ±3.0% | ±3.0%           | ±1.0% |

| OTHER PARAMETERS      | Unit                | Accuracy                       | Comments                             |
|-----------------------|---------------------|--------------------------------|--------------------------------------|
| Energy                | KW/h                | 0.1 kW/h                       | Calculated from specific parameters  |
| Static Pressure       | in.H₂O              | ±1.6 in.H <sub>2</sub> O       | Direct Measurement                   |
| Differential Pressure | in.H <sub>2</sub> O | $\pm 0.12$ in.H <sub>2</sub> O | Direct Measurement (less barometric) |

**CO Measurement** Compensated for interference from hydrogen up to 1% hydrogen. Cross sensitivity approx 1%.

Flow Typically 300 cc/min

Flow with 5.9 in.Hg Vacuum Approximately 250 cc/min

**Operating Temperature Range** 32°F-104°F

**Relative Humidity** 0-95% non condensing

**Barometric Pressure** ±5.9 in.Hg from calibration pressure

**Barometric Pressure Accuracy** ±0.15 in.Hg typically

**Battery Life** Typical use 10 hours from fully charged

**Charge Time** Approximately 2 hours from complete discharge

# **CALL GEOTECH TODAY (800) 833-7958**

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