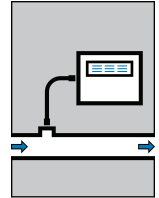




# LANDTEC

## GEM™2000 PLUS

PORTABLE GAS ANALYZER



## Enhanced Model Enables Field Technicians

The GEM™2000 is designed & field proven to monitor landfill gas extraction systems accurately & 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 hrs use from one charge)
- Accepts protocols
- Two instruments in one (GA and GEM mode)

### Benefits

- Minimize erroneous CO readings
- No need to take more than one instrument to site
- Can be used for routine sub-surface migration monitoring of landfill site perimeters *and* for measuring gas composition, pressure and flow in gas extraction systems
- The user is able to set up comments and questions to record information at site and at each sample point
- Ensures consistent collection of data for better analysis
- Allows balancing of gas extraction systems

### Applications

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



## Technical Specification

**GEM™2000 PLUS**  
PORTABLE GAS ANALYZER

### Gases Measured

CO<sub>2</sub>, CH<sub>4</sub>, by dual wavelength infra-red cell with reference channel. O<sub>2</sub>, H<sub>2</sub>S, CO (Hydrogen compensated) by internal electrochemical cell

Range		O <sub>2</sub>	0-25%
CH <sub>4</sub>	0-100% Reading	CO	0-2000ppm
CO <sub>2</sub>	0-100% Reading	H <sub>2</sub> S	0-200ppm

Gas Accuracy	CH <sub>4</sub>	CO <sub>2</sub>	O <sub>2</sub>
0-5%	±0.5%	±0.5%	±1.0%
5-15%	±1.0%	±1.0%	±1.0%
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.H <sub>2</sub> O	±1.6 in.H <sub>2</sub> O	Direct Measurement
Differential Pressure	in.H <sub>2</sub> O	±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.



An involved and contributing member of the Solid Waste Association of America



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