



# **GEMTM2000PLUS**





## PORTABLE GAS ANALYZER INSTRUMENTATION

### **Enhanced Model Enables Field Technicians**

The GEM<sup>TM</sup>2000 PLUS is designed & field proven to monitor landfill gas extraction systems accurately & efficiently. The GEM<sup>TM</sup>2000 PLUS offers all the advantages and capabilities of the GEM<sup>TM</sup>2000. Utilizing new technology the GEM<sup>TM</sup>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>5</sub> and O<sub>5</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> and user-defined comments
- Records site and well conditions
- Extended operation (10 14 hrs use from one charge)
- Certified instrinsically safe for landfill use
- 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 perimeter probes 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 accurate analysis
- Allows balancing of gas extraction systems

#### **Applications**

- Subsurface Migration Probes
- Gas Extraction Wells
- Flare Monitoring
- Landfills



### -Technical Specification ———

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

Range		$O_2$	0-25%
CH <sub>4</sub>	0-100% Reading	СО	0-2000ppm
CO <sub>2</sub>	0-100% Reading	H <sub>2</sub> S	0-500ppm

Gas Accuracy	CH <sub>4</sub>	$CO_2$	$O_2$
0-5%	±0.3%	±0.3%	±1.0%
5-15%	±1.0%	±1.0%	±1.0%
15% - Full Scale	±3.0%	±3.0%	±1.0%

Other Parameters	Unit	Resolution	Comments
Energy	BTU/hr	1000 BTU/hr	Calculated from specific parameters.
Static Pressure	in.H <sub>2</sub> O	0.1 in.H <sub>2</sub> O	Direct Measurement
Differential Pressure	in.H <sub>2</sub> O	0.001 in.H <sub>2</sub> O	Direct Measurement

Compensated for interference from Hydrogen up to 1% Hydrogen.
Cross sensitivity approx 1%.
Typically 300 cc/min
Approximately 250 cc/min
32°F - 104°F
0-95% non condensing
±5.9 in.Hg from calibration pressure
±1% typically
Typical use 10 hours from fully charged
Approximately 2 hours from complete discharge.





LANDTEC North America Western Sales Office (800) 821-0496 • Fax (909) 825-0591

Eastern Sales Office (800) 390-7745 • Fax (301) 391-6546 LANDTEC South America +55(11) 5181-6591 • Fax +55(11) 5181-6585 www.LANDTEC.com.br

