

SEM5000



GEOTECH
by QED

envirotechnics

SEM5000 | LEAK DETECTION

The SEM5000 Portable Methane Detector is the ideal instrument for landfill surface emissions monitoring, reporting and detecting potential leaks at wellheads and surface penetrations. Thanks to our patented laser technology,

The SEM5000 is selective, specifically to Methane and is able to detect Methane emissions from ppmVol to 100%Vol concentration.

FEATURES

- Specific to Methane
- Wide Measurement Range (0 ppm to 100% volume)
- Rapid Response (Less than 2.5 seconds)
- Integral GPS and Bluetooth
- GPS Accuracy: 2-4 Metres
- ATEX Certified – Zone 1
- Laser Technology
- Lightweight
- Ergonomic
- Selector Dial Interface
- Proprietary Software
- Hot Swap Battery
- Expanded Memory
- Biennial Calibration


BENEFITS

- No Cross-Gas effect or False Readings
- Accurate Measurement
- No Additional Devices Required
- Accurate Reporting
- Intrinsically Safe
- Highly Accurate, No Flame, No Hydrogen
- Weighs Half as Much as Competing Technologies
- Hands-Free Operation
- Easy to Use
- Multiple Reporting Functions
- Holds up to 480 Hours of Scan Data
- Saves Money



SEM5000

TECHNICAL SPECIFICATIONS

POWER SUPPLY			
Battery type	Lithium Ion Rechargeable Battery Pack (3.7V - 4000mA/h)		
Battery life	10 hours at 20°C (with backlight activated). 8 hours at extreme temperatures		
Battery charger	Separate intelligent battery charger powered from mains supply (100-240V)		
Charge time	Approximately 4.5 hours from complete discharge		
GAS RANGES			
Gases Measured	CH ₄		
Range	0-10,000ppm / 1%-100% (Vol)		
Response time	Without Probe	With Probe	
	T90 = 2s	T90 = 3.5s	
Accuracy	1-10ppm	10-10,000ppm	
	+/- 0.7ppm	+/-10% FS	
Resolution	0.1ppm / 0.1%		
Minimum detectable limit	0.3ppm		
PUMP			
Flow	Minimum	Typical	Maximum
	0.6 L/Min	0.8 L/Min	1.0 L/Min
ENVIRONMENTAL CONDITIONS			
Operating Temperature	-25°C to +50°C		
Atmospheric Pressure Range	1013mbar +/-100mbar		
Humidity Range	5% to 80% Relative Humidity (non -condensing)		
Protection level	IP65		
PHYSICAL			
Case	Carbon reinforced polyamide with fiberglass		
Size	L 229mm, W 97mm, D 109mm		
Weight	1.3kg		
Environmental Storage conditions	Humidity <95% -40°C to +60°C		
Alarm sound level	65 dB (A) @ 30cm		
User Interface	Large Dot Matrix Display: 240 x 128		
	Jogdial: Scroll menu for rapid and easy selection of menu items		
	2 function keys		
Alarms	Methane concentration threshold		
	Pump flow fail		
Gas connections	Quick release coupler		
Electrical connections	Multiway adaptor for battery charger and USB communications with a PC		
Carrying strap	30mm wide synthetic woven strap		
Status indicators	Measurement mode		
	Battery level		
	Pump		
	PC communications		
CERTIFICATION RATING			
ATEX	 II 2 G Ex ib op is IIB T3 Gb -25°C≤Ta≤+50°C		