The easy way to monitor surface emissions SEM50000 portable methane detector



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 0.5ppm to 100% concentration. The SEM5000 is ATEX Zone 1 certified and meets all Method 21 requirements, making it the perfect tool for regulatory compliance.



The hot swap battery saves time and allows you to keep working. The SEM5000 works as long as you do.



The SEM5000 is ATEX certified and meets Method 21 requirements for regulatory compliance.



Our proprietary SEMsoft software is easy to use and offers multiple reporting functions.



The QED Online Weather Tool provides accurate reporting of weather conditions for your scan events.





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 Meters Meets EPA Method 21 Requirements ATEX Certified – Zone 1 Laser Technology Lightweight Ergonomic Selector Dial Interface Proprietary Software Hot Swap Battery Expanded Memory Biennial Calibration

BENEFITS

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

Target Gas	Methane (CH4)
Detection Method	Tunable Diode Laser Absorbtion Spectroscopy
Measurement Range	0.5ppm to 100% volume
Instrument Resolution	0.1ppm (0 - 100ppm) 1ppm (100 - 1,000ppm) 5ppm (1,000 - 5,000ppm) 10ppm (5,000 - 10,000ppm)
Pump Flow Rate	0.6 to 1 l/min
Sampling Probe Outside Diameter	4mm
Intrinsic Safety	ATEX Zone 1 Ex II 2 G Ex ib op is IIB T3 Gb Tamb: -30°C to +50°C
Response Time	T90 = 2.5 seconds T90 = 3.5 seconds (w/probe)
GPS Accuracy	2 to 4 meters
Power Supply	Lithium Ion Rechargeable Battery Pack (3.7V - 4000mA/h)
Battery Autonomy	10 hours at 68°F (with backlight activated). 8 hours at extreme temperatures
Battery Charge Duration	8 to 10 hours to full charge
Temperature Range	-13°F to 122°F
Warm Up Time	30 to 60 seconds
Weight	3.5 lbs.
Enclosure Protection Level	IP65 / NEMA4
Factory Calibration Requirement	2 years
Field Calibration	Daily (meets Method 21; sections 7.0, 8.0)

TECHNICAL SPECIFICATION