매립 가스 자동 측정 시스템
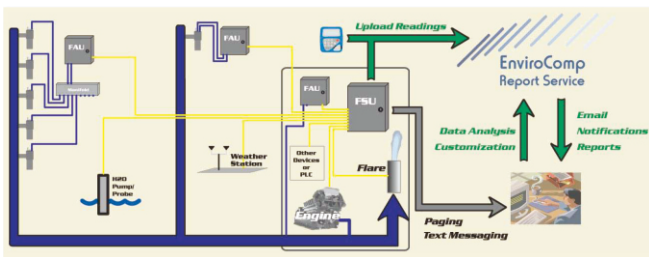
대기 | 실내 | 작업환경 | Bio 및 매립지가스

Landfill Gas Monitoring System

Model : **AEMS**

용도   Applications

- 매립지 배출 가스 중 CH_4, CO_2, O_2 및 H_2S 연속 자동 측정
- 매립지 배출 가스 농도, 화재 유무 및 안정화 정도 측정
- 하수 처리장 및 축분 발효 장치 등의 바이오 가스 측정

특징   Features

- 원격 데이터 수집 가능
- 측정값 이력 데이터 보관
- 원격 관리 가능(웹 사용)
- 동시에 2지점을 모니터링 가능 (선택사양)
- 3,000개의 데이터 저장 가능
- 유량, 압력, 온도 측정 가능
- CO 1,000ppm까지 측정 가능 (선택사양)
- H_2S 5,000ppm까지 측정 가능 (선택사양)
- 로컬 통신 및 데이터 전송
- 교체 가능한 가스 측정 모듈
- 자동 영점 및 퍼지 기능, 자가 진단 기능
- 탄소 배출권 거래용 S/W 추가 기능.
- 자동 교정 기능

SPECIFICATIONS

FSU

Industrial Rated Field Computer
Proven Operating System
Solid State Electronics
Internet access via dedicated phone line, cellular or satellite connection
Functions with most major PLC's - Allen Bradly, GE Fanuc, Modicon and others
4 Serial Ports, 2 Parallel Ports, 1 Ethernet Port
UL Approved Components in a NEMA 4 Enclosure

Operating Environment	-20C to +60C
Power Required	110V AC

FAU

FAU Typical Accuracy	Concentration	%CH₄ by Volume	%CO₂ by Volume	%O₂ by Volume
	5%(LEL, CH₄)	±0.3%	±0.3%	±1.0%
	Full Scale	±3.0%(70%)	±3.0%(40%)	±1.0%(25%)

122   03 바이오/매립지 가스 측정기

FAU Specification	Sensor Range	Resolution
Methane-CH$_4$	0-70%	0.1%
Carbon Dioxide-CO$_2$	0-50%	0.1%
Oxygen-O$_2$	0-25%	0.1%
Pump Flow Rate		500 cc/min. @ nominal flow.
Vacuum		Up to 80" W.C.
Communication		RS232 connection
FAU Conditioning Unit		
Silicone Particulate Filter and Membrane		
Filter Media		coalescing efficiency of 99.97% (0.3 - 0.6 Microns)

CONFIGURATIONS

Field Analytical Unit Package	1 set

Fixed position Landfill or Biogas gas analyzer with field proven Infrared technology for continuous gas monitoring. Includes Gas Conditioning Unit, automatic sampling and analysis of gas composition, % by volume of CH$_4$, CO$_2$, O$_2$ & balance gas, % LEL CH$_4$, barometric and relative pressure. Installed in NEMA 4 enclosure. Operating environment of -18°C to 54°C

Field Server Unit	1 set

Flexible electronic data collection and storage system that collects data from electronic input signals and/or polling existing PLC's and extracting data from the Field Analytical Unit. Industrial grade field computer with solid state electronics, proven operating system with web based access, 64 MB on-board storage, surge protector, 4 serial ports, 2 parallel ports, 1 Ethernet port and cell modem. Installed in a NEMA 4 enclosure. Functions as an auto dialer and multi-channel chart recorder.

SOFTWARE

Landfill Gas Pro Software Service- price per year	1 set

Service Includes: User access to the LFG Pro Software System online. Easy access to wellfield information, historical data reporting, automated e-mail notifications and reports. Data storage, backup, archiving of AEMS data. Offers concentration maps for compliance and reports relevant for LFG extraction/power generation.

Envirocomp - price per year	1 set

Access to information, historical data reporting and automated e-mail notification. Concentration maps to meet with NSPS compliance, view oxygen hotspots/air ingress, gas temperature and static pressure.

OPTIONAL ACCESSORIES

FAU Automated Calibration	1 ea

Automated calibration of analyzer with known gases to maintain minimum +/- 1.0% accuracy with analysis. Calibration Gas Bottles

Set of 2 need to be purchased locally

Locally supplied, 99.97% Purity, one bottle of CH$_4$/CO$_2$/N$_2$ mixture and one bottle of O$_2$/N$_2$ mixture. Actual gas concentrations to be determined by site evaluation.

8 x 4 to 20mA output	1 ea
Hydrogen sulphide measurement (also requires 4 to 20mA input mod.)	1 ea
4-20mA Input Module, up to 8 inputs	1 ea
Temperature Probe for FAU	1 ea
Spare Analyzer for FAU	1 ea

Interchangeable spare analyzer for FAU with hard case for storage & transportation

Back Plane Assembly	1 ea

Aluminum back plane with AEMS enclosures and panels mounted

Security Cage Small	1 ea

Steel cage with AEMS enclosures and panels mounted

Security Cage Large	1 ea

Steel cage with AEMS enclosures and panels mounted and calibration gas bottle rack. Yellow

FSU Spare Parts Kit	1 ea

Contains key components of the AEMS system. The intended use is for replacement of equipment in the occasion that damage is taken due to unforeseen events such as lightning storms, flooding, electrical surging, etc.. This provides an onsite source for parts as shipping may introduce unexpected delays and downtime for a project

3 points Sampling	1 ea