



Coal mine methane  
VAM projects  
CDM

## Ventilation air methane analyser

The VAM analyser accurately measures low concentrations of methane (CH<sub>4</sub>) and reduces cross-gas effects of other hydrocarbons present in the sample

### Benefits

- Remote or local data download
- Automated monitoring
- Transportable analyser
- SMS flow fail notification
- Mains or battery powered
- Reliable data
- Robust and rugged case

### Features

- CH<sub>4</sub> to 0.01 resolution
- Optional gas flow measurement
- Optional gas temperature measurement
- Clean air purge
- Auto zero of gas channels
- GSM modem
- Barometric pressure
- IP65 rated
- Gas conditioning filters
- Event log
- Stores 3000 readings (31 days at 15 minute intervals)

### Applications

- VAM gas analysis
- CDM project trials
- Coal mine methane monitoring



## Technical Specifications

### VAM

#### POWER

Power requirements	10 to 14 V DC, typically 360ma
Separate power supply	Input: 110 to 220 V AC Output: 12 V DC 2.3A Hr battery back up
Memory backup battery	Lithium manganese for data retention
Battery specification for battery powered system	12V lead acid battery suitable for continuous low current discharge. Approximately 2.5 hours operation per AHr of battery capacity

#### RANGE AND ACCURACY

Range CH <sub>4</sub>	0 to 1.5%
Typical accuracy CH <sub>4</sub>	+/- 0.03% vol
Response time T <sup>90</sup>	< 20 seconds

#### FACILITIES

Temperature measurement	With optional probe -10°C to +75°C
Temperature accuracy	± 0.2°C (+/- probe accuracy)
Flow measurement	With optional probe 0.7 to 40m/s
Flow accuracy	+/- 1.0% FS
Data storage	3000 readings (31 days at 15 minute intervals)
Event storage	1000 events
Communications	RS232 protocol via download lead with variable baud rate modem link for remote data access

#### PUMP

Flow	300cc/min typically
Flow with 200mbar vacuum	250cc/min approximately
Vacuum pull	400mbar approximately

#### ENVIRONMENTAL CONDITIONS

Operating temperature range	0°C to 40°C
Relative humidity	0 to 95% non condensing
Case seal	IP65
Barometric pressure	± 200 mbar from calibration pressure
Barometric pressure accuracy	± 5 mbar typically

## Technical Specifications

### VAM, cont'd.

#### PHYSICAL

Weight (main unit)	9.5 kg
Size (main unit)	L 530mm, W 440mm, D 220 mm
Case material	Polypropylene
Keys	Membrane panel
Display	Liquid crystal display, 40 x 16 characters. Fibre optic woven back-light for low light conditions
Gas sample filters	User replaceable two stage filters on sample and purge air inlets