

POWER SUPPLY	
<b>Battery type</b>	Rechargeable Nickel Metal Hydride battery pack containing six 4AH cells (not user replaceable)
<b>Battery life</b>	Typical use 10 hours from fully charged
<b>Battery lifetime</b>	Up to 1000 charge/discharge cycles
<b>Battery charger</b>	Separate intelligent 2A battery charger powered from mains supply (100-240V 47-63Hz)
<b>Charge time</b>	Approximately 2 hours from complete discharge
<b>Alternative power</b>	Can be powered externally for fixed in place applications. Contact Geotechnical Instruments (UK) Ltd for further information
<b>Memory backup battery</b>	Lithium Manganese for data retention.


GAS RANGES					
<b>Gases measured</b>	CO2 and CH4	By dual wavelength infrared cell with reference channel			
	O2	By internal electrochemical cell			
	CO (hydrogen compensated)	By internal electrochemical cell			
	H2S 0-500ppm	By internal electrochemical cell			
	H2S 0-5000ppm	By external gas pod (option)			
	NH3 0-1000ppm	By internal electrochemical cell (non standard option)			
	H2 0-1000ppm	By internal electrochemical cell (non standard option)			
	A full range of gas pods can be used as well as the two internal cell positions.				
<b>Range</b>	CH4	0 -70% to specification, 0-100% reading			
	CO2	0 -60% to specification, 0-100% reading			
	O2	0 -25%			
	CO	0 -2000ppm			
	H2S	0 -500ppm internal or 0 -5000ppm external pod			
<b>Typical accuracy</b>	<b>Gas</b>	<b>0-5% vol</b>	<b>5-15% vol</b>	<b>15%-FS</b>	<b>FS</b>
	CH4	±0.5% (vol)	±1.0% (vol)	±3.0% (vol)	70%
	CO2	±0.5% (vol)	±1.0% (vol)	±3.0% (vol)	60%
	O2	±1.0% (vol)	±1.0% (vol)	±1.0% (vol)	25%
	<b>Gas</b>	<b>Range</b>	<b>0-FS</b>		
	CO	0 -2000ppm	±10.0% of reading or 15ppm, whichever is greater		
	H2S	0 -500ppm	±10.0% FS		
<b>Response time, T90</b>	CH4	≤20 seconds			
	CO2	≤20 seconds			
	O2	≤20 seconds			
	CO	≤60 seconds			
	H2S	≤60 seconds			
<b>CO measurement</b>	Compensated for interference from hydrogen up to 1% hydrogen. Cross sensitivity approx 1%.				
<b>Oxygen cell lifetime</b>	Approximately 3 years in air				
<b>Other Electrochemical cells lifetime</b>	Approximately 2 years in air				

FACILITIES	
Temperature measurement	-10°C to +75 °C with optional probe
Temperature accuracy	±1.0 °C with optional probe
Flow from borehole	0 – 20 L/Hr internal measurement
Flow from borehole accuracy	± 0.3 L/hr
Visual and audible alarm	User selectable CO <sub>2</sub> , CH <sub>4</sub> and O <sub>2</sub> alarm levels *
Communications	Via USB lead to 7 pin Lemo connector*
Relative pressure	±500 mbar from calibration pressure
Relative pressure accuracy	±4mbar typically (should be zeroed before reading) to ±15mbar max
Available Memory	1000 IDs* 2000 Readings 1000 Events*

PUMP	
Flow	350 to 400 ml/min typical flow rate in free air
Flow fail point	50ml/min approximately – user settable *

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

PHYSICAL	
Weight	2 Kilograms
Size	L 63mm, W 190mm, D 252mm
Case material	ABS
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 integral fibre filter at inlet port and an external PTFE water trap filter

CERTIFICATION RATING	
ATEX	 II 2G EEx ib d IIA T1 (Ta = 0°C to +40°C)
MCerts	Sira MC 080126/00 Compatible to instrument serial number 10,000 and above

\* Gas Analyser Manager software required.