



FIXED AND PORTABLE GAS ANALYSERS CATALOGUE

AD plants

Landfill

WWTP

CHP engine

Gas flaring

Biomethane

Coal mine AMM

Applications

Selection by applications	Waste Water Treatment plants (WWTP)	Landfill	Gas flaring	Biomethane-gas to grid	CO2 % recovery	Abandoned coal mine methane	Agriculture waste AD	Mixed food waste AD	Farm waste AD	Research	SynGas gasification process	Engine exhaust Compliance emissions reporting	Engine tuning/profiling	Engine exhaust continuous CEM
	Fixed													
SWG100 BIOEX	●	●	●											
SWG100 BIOEX M				●	●									
SWG100 BIOEX CB						●								
SWG100 BIOGAS							●	●	●	●				
SWG100 BIOCOMPACT							●	●	●					
SWG100 CEM														●
Portable														
RASI800 MCERTS												●	●	
RASI700 BIO							●	●	●					
RASI 700 (depend on kit configuration)							●	●	●	●		●	●	
RASI 901 SYN											●			



Selection by specifications	O2, CO2, CH4, H2S measurements	High and low H2S measurement	CO, H2 measurements	CH4/CO2 ppm measurement	Continuous monitoring	ATEX certified	Gas cooler and condensate pump	Out door/indoor installation	IP rating	Analogue outputs	Industrial interfaces	Maximum number of sampling points	Monitor pre-after the H2S treatment	User calibration
	Fixed													
SWG100 BIOEX	●	●	●		●	●	●	●	65	●	●	4	●	●
SWG100 BIOEX M				●	●	●	●	●	65	●	●	4	●	●
SWG100 BIOEX CB					●	●	●	●	65	●	●	4	●	●
SWG100 BIOGAS	●	●	●	●	●		●	●	54	●	●	10	●	●
SWG100 BIO COMPACT	●							●	54	●	●	2	●	●

Who's EIUK

Eurotron Instruments UK limited is a leading manufacturer , distributor and service provider of portable and fixed gas analysers and emissions monitoring system for the biogas and landfill industry.

Every day our analysers help in protecting valuable assets such as CHP's Gas Engines, optimising AD processes and complying with emissions regulation.

Why choosing EIUK

- Eurotron Instruments UK ltd products are known for reliability, ruggedness, easy to use and extreme accuracy over a long period of time.
- Excellent products application knowledge with-in a highly customer oriented company
- Our Service Team offer a range of capabilities which extends beyond repairing, maintaining and calibrating your gas analyser.
- Fastest service turnaround for portable units in the industry and excellent on-site support
- Our on-site service team gives you peace of mind when you select and install one of our fixed site gas analyser.
- 95 % of our customers are recurring customer which indicates we are "doing some right"

On-site servicing gives you peace of mind

Choosing a fixed site gas analyser is not only matter of specifications or price. What is becoming more important after the installation is the quality of service, the approach to the service, back-up and how quick we can react to match our customer expectation.

We do believe that fixed gas analysers should be serviced and calibrated **on site** as this is the only way to perform a complete functional test and ensure that all wearing parts and filters are replaced when needed. This goes far beyond just calibrating the unit in a laboratory condition.

In order to keep supporting the growing sales of gas analyser, we have further expanded our on-site service engineer team with a new arrival, and renew our service van fleet with a fully equipped VAN to carry on any time of service and repair on site.



In-house service

All our portable gas analysers are checked, serviced and calibrated using our ISO 9001:2008 audited and certified service centre. Servicing your analyser is important as it minimise downtime, maximise the cells life and keeps the analyser within its specifications and up to date with the latest firmware upgrade. Every months we service in excess of 200 units with an average turnaround of only 2 days which put us in a leading position when it comes to customer satisfaction. Each analysers is quality tested before being sent back, to ensure full functionality and correct customer specific instrument configuration.



To service your analyser, please get in touch with us:

Eurotron instruments UK ltd

Unit 18 Austin Way
Royal Oak Industrial Estate
NN11 8QY
Daventry

T: 01327871044

E: service@eurotron-uk.com

www.ei-uk.com



SWG 100 BIO-EX

Fixed gas analyser



ATEX certified fixed gas analyser

The SWG 100 BIOGAS is a purpose made fixed gas analyser, designed for use in landfill gas sites, biogas plants (AD plants), Waste Water Treatment Plants, biomethane plants and colamine AMM sites

This self contained and self installed gas analyser is designed and built for **continuous monitoring** and it is a vital tool for CHP's engines protection and process monitoring

Benefits and key features:

- ATEX certified to **Ex II 3G Ex nA IIA T1Gc** for installation in ZONE II AREA
- Continuous monitoring system
- High accurate CH4% readings thanks to the integrated gas cooler and temperature and pressure compensated NDIR sensor.
- Dual H2S sensor in the same unit for low and high concentration
- Monitor pre- and post- H2S treatment
- Integrated Peltier cooler and pump for automatic moisture removal
- All standard industrial interfaces to integrate with CHP engines or Scada systems
- "Plug and Play" pre calibrated sensors field user replaceable
- Zero service downtime
- Self installed, no training required
- User calibration function/auto calibration to maintain high accuracy reading
- Extensive data logging function and event logging for condition analysis

Applications



Biogas (AD plants)



Landfill gas



WWTP/Sewage



Biomethane

Features

	Standard	Optional
Cabinet IP 65, Stainless Steel, weather proof	●	
ATEX certified (Ex II 3G Ex nA, IIA T1, Gc) suitable for installation in ZONE II AREAS	●	
Internal cabinet gas sniffing with power supply cut off in case of gas leak	●	
Flow controlled Strong Sample gas pump with internal flow monitoring and alarm to overcome pressure changes	●	
Auto-zero solenoid valve for Auto-Zero in air	●	
Integrated Peltier Gas cooler and condensate pump for automatic moisture removal with condensate alarm	●	
Automatic span calibration	●	
User Calibration function	●	
Universal Power Supply 90-240 Vac	●	
3.5" TFT color display with password protected menu	●	
RS 485 and Modbus RTU communication	●	
CH4% and CO2 % NDIR measurements	●	
O2 measurement with long life sensor	●	
High H2S continuous measurement		●
Low H2S measurement with cutoff valve and clean air purge pump for sensor protection		●
CO measurements with EC cell		●
H2 measurement with EC cell		●
H2 measurement cell (0-100%) using TCD sensor		●
Multi sampling point up 4 sites		●
Multiple 4 x 4-20 mA output/inputs modules with 2 x "fail/safe" alarm relay		●
Profibus, Ethernet, Profinet communication		●
Web enabled remote access and data logging		●
External control of the analyser via 4 x relay contacts		●
Cabinet heater		●

SWG 100 BIO-EX

Fixed gas analyser

Specifications

Measurement components					
Gas	Range	Sensor Type	Accuracy*	Resolution	Method
CH4	0-10 %	NDIR	± 0,3 % Vol	0.01 %	Continuos
CH4	10-65 %	NDIR	± 0,5% Vol	0.01 %	Continuous
CH4	65-100 %	NDIR	± 1.5 % Vol	0.01%	Continuos
CO2	0-100 %	NDIR	± 0.3 % Vol	0.01%	Continuos
CO2	10-65 %	NDIR	± 0,5 % Vol	0.01 %	Continuos
CO2	65-100 %	NDIR	± 1.5 % Vol	0.01 %	Continuos
O2	0-25 %	EC	± 0,2% Vol	0.1%	Continuos
H2S low	0-50 ppm/250 ppm	EC	± 5 ppm	1 ppm	Continuos & Discontinuous
H2S medium	0-2000 ppm/4000 ppm	EC	± 5 ppm	1 ppm	Continuos & Discontinuous
H2S high	0-5000 ppm/10000 ppm	EC	± 50 ppm	1 ppm	Continuos
H2	0-1 %	EC	± 20 ppm	0.01%	Continuos
H2	0-100%	TCD	± 2%	0.01%	Continuos
CO (H2 comp)	0-10000 ppm	EC	± 20 ppm	1 ppm	Continuos
Barometric pressure	850 to 1150 mbar	Piezo	n/a	1 mbar	Continuos
Calculated vale	Calorific value: 0-50 MJ/m3; MJ/Kg				
General					
Sampling points	1-4				
Display	3.5" TFT color graphical display, back light, window protected				
Keyboard	Tactile keypad password protected menu				
Industrial Interfaces/alarms/communications/Data logging					
Analogue	Up to 40 x 4-20 mA output/input analogue channels (self powered), individually configurable for each gases, with hold last reading function and delay resume function (user selectable)				
Alarms	Up to 20 user configurable alarm which trig a relay output (free contact 24VDC/5A) on above/below condition				
System Alarm	1 system alarm				
Digital	Modbus RTU as standard, optional ethernet, profinet, profibus dp and web enabled remote access				
Data logging	Internal extensive data logging function with user define logging interval- Data export to SD card				
Event logging	System monitoring with extensive event logging of faulty conditions to SD card for trouble shooting				
Sample					
Gas inlet	Stainless steel gas fittings with 1/8" ID thread				
Cooler	Integrated Peltier cooler with continuos condensate draining pump				
Filter	Teflon particulate filter, Internal Viton hosing				
Flow	Monitored and regulated flow 40...60 l/h				
Pressure	Sample Inlet Pressure -100 mbar trough 300 mbar, auto regulated				
Safety					
Rating	II 3G Ex nA IIA T1 GC certified for use in Zone II areas				
Norms	Comply to EN650079-15 and RL 94/9/EG				
Case Sniffing	Internal cabinet gas sniffer with alarm and power supply cut off				
Flow	Stainless steel flow orifice flow restrictor				
Physical					
Dimension/Weight	700 x 600 x 210 mm (H x W x D) wall mounting, 45 KG				
IP RATE	IP 65 Stainless steel cabinet				
Notes	* Accuracy of the calibration gas not included. When calibrated with-in its recommended service interval				

SWG 100 Biogas

Fixed gas analyser



Fixed Gas Analyser for continuous monitoring of O₂, CH₄, CO₂, H₂S within biogas applications

The SWG 100 BIOGAS is a purpose made fix gas monitor system, primarily designed for use in Large & medium scale AD plants and Biomethane upgrade.

This self contained and self installed gas analyser is designed and built for continuous monitoring and it is a vital tool for protecting CHP's engine from sudden gas level changes and to monitor and control the process.

Benefits and key features:

- Continuous monitoring system
- NO dilution of gas sample required
- Dual H₂S sensor in the same unit for low and high concentration
- Monitor pre- and post- H₂S treatment
- Integrated Peltier cooler and pump for automatic moisture removal
- Multiple 4-20 mA and alarm relay output (user configurable)
- "Plug and Play" pre calibrated sensors field user replaceable
- Zero service downtime
- Self installed, no training required
- Simple user calibration and service

Applications



Biogas (AD plants)



Waste food



Agriculture



CHP engine

Features

	Standard	Optional
Wall rack mounting, IP 54 aluminium cabinet	●	
Monitored ventilated cabinet, with display and system alarm, including flow restrictor orifice.	●	
Internal % LEL gas detector (alarm threshold on CH ₄)		●
Flow controlled Strong Sample gas pump with internal flow monitoring and alarm overcome pressure changes	●	
Auto-zero solenoid valve for Auto-Zero in air	●	
Automatic span calibration	●	
Universal Power Supply 90-240 Vac	●	
3.5" TFT color display with password protected menu	●	
RS 485 and Modbus communications	●	
CH ₄ % and CO ₂ % NDIR measurements	●	
O ₂ measurement with long life sensor	●	
High H ₂ S continuous measurement		●
Low H ₂ S measurement with cutoff valve and clean air purge pump for sensor protection		●
CO measurements with EC cell		●
H ₂ measurement with EC cell		●
H ₂ measurement cell (0-100%) using TCD sensor		●
Integrated Peltier Gas cooler with automatic moisture removal pump		●
Multi sampling point up to 10 sites		●
Multiple 4 x 4-20 mA output/inputs modules with 2 x "fail/safe" alarm relay		●
Profibus, Ethernet, Profinet communication		●
Web enabled remote access and data logging		●
External control of the analyser via 4 x relay contacts		●
Cabinet heater		●

SWG 100 Biogas

Fixed gas analyser

Specifications

Measurement components					
Gas	Range	Sensor Type	Accuracy*	Resolution	Method
CH4	0-10 %	NDIR	± 0,3 % Vol	0.01 %	Continuos
CH4	10-65 %	NDIR	± 0,5% Vol	0.01 %	Continuous
CH4	65-100 %	NDIR	± 1.5 % Vol	0.01%	Continuos
CO2	0-100 %	NDIR	± 0.3 % Vol	0.01%	Continuos
CO2	10-65 %	NDIR	± 0,5 % Vol	0.01 %	Continuos
CO2	65-100 %	NDIR	± 1.5 % Vol	0.01 %	Continuos
O2	0-25 %	EC	± 0,2% Vol	0.1%	Continuos
H2S low	0-50 ppm/250 ppm	EC	± 5 ppm	1 ppm	Continuos & Discontinuous
H2S medium	0-2000 ppm/4000 ppm	EC	± 5 ppm	1 ppm	Continuos & Discontinuous
H2S high	0-5000 ppm/10000 ppm	EC	± 50 ppm	1 ppm	Continuos
H2	0-1 %	EC	± 20 ppm	0.01%	Continuos
H2	0-100%	TCD	± 2%	0.01%	Continuos
CO (H2 comp)	0-10000 ppm	EC	± 20 ppm	1 ppm	Continuos
Barometric pressure	850 to 1150 mbar	Piezo	n/a	1 mbar	Continuos
Calculated vale	Calorific value: 0-50 MJ/m3; MJ/Kg				
General					
Sampling points	1-10				
Display	3.5" TFT color graphical display, back light, window protected				
Keyboard	Tactile keypad password protected menu				
Industrial Interfaces/alarms/communications/Data logging					
Analogue	Up to 40 x 4-20 mA output/input analogue channels (self powered), individually configurable for each gases, with hold last reading function and delay resume function (user selectable)				
Alarms	Up to 20 user configurable alarm which trig a relay output (free contact 24VDC/5A) on above/below condition				
System Alarm	1 system alarm				
Digital	Modbus RTU as standard, optional ethernet, profinet, profibus dp and web enabled remote access				
Data logging	Internal extensive data logging function with user define logging interval- Data export to SD card				
Event logging	System monitoring with extensive event logging of faulty conditions to SD card for trouble shooting				
Sample					
Gas inlet	Stainless steel gas fittings with 1/8" ID thread				
Cooler	Integrated Peltier cooler with continuos condensate draining pump				
Filter	Teflon particulate filter, Internal Viton hosing				
Flow	Monitored and regulated flow 40...60 l/h				
Pressure	Sample Inlet Pressure -100 mbar trough 300 mbar, auto regulated				
Safety					
Norms	Comply to EN650079-15 and RL 94/9/EG				
Case Sniffing	Optional Internal gas leak detector with alarm and gas supply shut off				
Flow	Stainless steel flow orifice flow restrictor				
Ventilation	Ventilated cabinet with monitored fan				
Physical					
Dimension/Weight	700 x 600 x 210 mm (H x W x D) wall mounting, 25 KG				
IP RATE	IP 54 Aluminium				
Notes	* Accuracy of the calibration gas not included. When calibrated with-in its recommended service interval				

SWG 100 Biocompact

Fixed gas analyser



Fixed Gas Analyser for monitoring of O₂, CH₄, CO₂, H₂S from small/medium scale AD plants

The biogas analyser can be configured to measure Oxygen (O₂%), Methane (CH₄%), Carbon Dioxide (CO₂%) and Hydrogen Sulphide (H₂S) from a single or dual sampling point.

The system automatically measure up to 24 times a day (with user defined intervals) or on demand by simply pressing a button. This features allow the operator to take additional gas readings as required outside the timed measurement sampling programme.

Benefits and key features:

- Single or dual sample point
- O₂, CH₄, CO₂% and H₂S measurements
- Timed and manual sampling
- Integrated gas pump and water trap with auto-drain function
- Data logging and storage
- 4-20 mA, modbus, profibus and profinet outputs
- Plug and Play pre-calibrated user replaceable sensors
- Low cost of maintenance, easy to operate
- User calibration function

Applications



Small AD plants



CHP engine protection



Farm-based AD plants



Food waste AD plants

Features

	Standard	Optional
Wall mounting, IP 54 suitable for indoor or outdoor installations	●	
Internal % LEL gas detector (alarm threshold on CH ₄)		●
Auto-zero solenoid valve for Auto-Zero in air	●	
Sampled or manual operation	●	
Universal Power Supply 90-240 Vac	●	
3.5" TFT color display with password protected menu	●	
RS 485 and Modbus communications	●	
CH ₄ % and CO ₂ % NDIR measurements	●	
O ₂ measurement with long life sensor	●	
H ₂ S measurements (0-5000 ppm)		●
Integrated water-trap with automatic moisture removal pump	●	
Multi sampling point up 2 sites		●
Multiple 4 x 4-20 mA output/inputs modules with 2 x "fail/ safe" alarm relay		●
Profibus, Ethernet, Profinet communications		●
Web enabled remote access and data logging		●
Cabinet heater		●

SWG 100 Biocompact

Fixed gas analyser

Specifications

Measurement components				
Gas	Range	Type	Accuracy	Method
CH4	0-100 %	NDIR	± 0,3 % Vol or 3% m.v	Sampled or on-demand
CO2	0-100 %	NDIR	± 0.3 % Vol or 3% m.v	Sampled or on-demand
O2	0-25 %	EC	± 0,2% Vol	Sampled or on-demand
H2S	0-2000 ppm/4000 ppm	EC	± 5 ppm	Sampled or on-demand
Barometric pressure	850 to 1150 mbar	Piezo	n/a	
Calculated vale	Calorific value: 0-50 MJ/m3; MJ/Kg			
Sampling Points	1-2			
Display	3.5" TFT color display, back light			
Keyboard	Tactile keypad password protected menu			
Output communications/industrial interface				
Analogue	Up to 12 x 4-20 mA output/input analogue channels (self powered), individually configurable for each gases, with hold last reading function and delay resume function (user selectable)			
Alarms	Multiple alarm relay outputs free contact 24VDC/5A			
Industrial Interfaces	Modbus RTU as standard, optional ethernet, profinet, profibus dp and web enabled remote access			
Data logging	On internal memory with data export to SD			
Event logging	Record of alarms/event to SD card			
Sample				
Gas inlet	Stainless steel gas fittings with 1/8" ID thread			
Water Trap	Integrated water trap with condensate draining pump(auto-drain)			
Filter	Teflon particulate filter, Internal Viton hosing			
Flow	40...60 l/h			
Pressure	Sample Inlet Pressure -100 mbar trough 300 mbar			
Safety				
	LEL% (CH4) internal gas detector			
	Sample gas shut-off solenoid valve			
	Stainless steel flow orifice flow restrictor			
Physical				
Dimension	400 x 500 x 300 mm (H x W x D) wall mounting			
Weight/protection	14 kg/ IP54			
Operating temperature	+5 to 45 °C (-10 to 45 °C with optional heater)			
Installation	Indoor or outdoor,			
Heater	Cabinet heater 200 W			
Mains/power	Universal 90-240 VAC/ 47...63 Hz, 42W.....242W with cabinet heater			

RASI 800 Engine Test KIT

MCERTS approved emissions analyser



MCERTS certified exhaust analyser for emissions testing on gas and diesel engines

The RASI 800 MCERTS Engine Test Kit is designed to provide accurate NOx readings on Gas engines employed in power generation.

It accurately measure O₂, CO, NO, NO₂, SO₂ and CO₂% (NDIR)

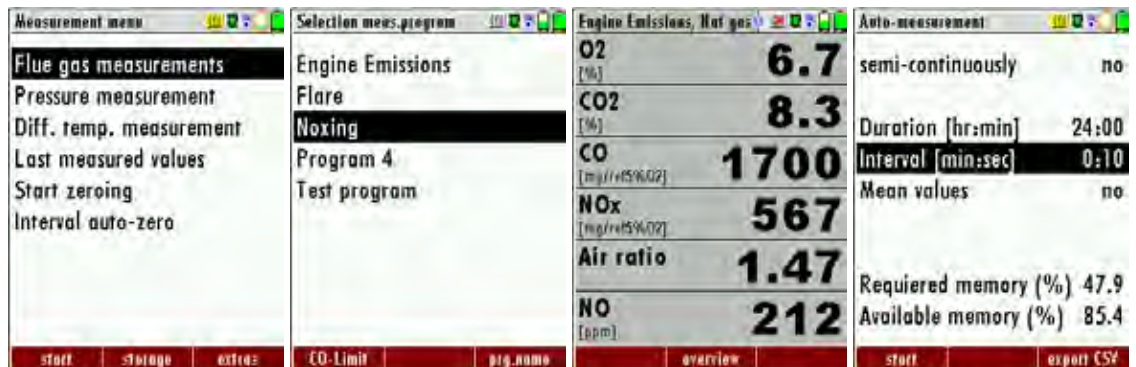
The RASI 800 MCERTS measure true NO_x (NO+NO₂) and display values in ppm or/and mg/m³ with automatic O₂ corrections.

Suited for long-term measurements

The advanced integrated gas preparation system (built-in cooler, condensate pump and fresh-air valve) allow for prolonged measurement cycles and provide highly accurate NO_x readings

MCERTS approved

The RASI 800 is MCERTS approved for Portable Emissions Monitoring Systems



TASK oriented and easy to navigate menu.

Application-guided menu with instruments pre-setting ensures that the correct parameters are used.

All the exhaust measurements are displayed on the large 3.5" TFT colour display of the RCU unit.

Automatic data logging with up to 24 h engine exhaust test and direct export of measured data to SD card as CSV file.

Base unit features

	Standard	Optional
O ₂ , CO, NO, NO ₂ measurement cell	●	
SO ₂ and CO ₂ (NDIR)		●
Stack and air temperature, pressure, draught and differential	●	
Peltier cooler with peristaltic pump for moisture removal and condensate monitor alarms	●	
Internal gas flow sample monitoring	●	
Purge valve for CO protection	●	
Auto zero (programmable) valve for long term measurements	●	
Li-Ion rechargeable battery and charger	●	
Aluminium framed case	●	
Built-in fast infrared printer	●	

RCU features

	Standard	Optional
Control analyser functions	●	
3.5" TFT display	●	
Data storage for transfer to PC	●	
2 GB SD card	●	
Automatic data logging	●	
Inductive charging	●	
MINI USB port	●	
Li-ION battery (30 hrs operation)	●	
Gas velocity and mass flow calculation		●
True NO _x , emissions display with O ₂ reference value.	●	
Socket for environmental measurements sensors	●	

RASI 800 Engine Test KIT

MCERTS approved emissions analyser

Specifications

	Range	Resolution	Sensor Life (typical)	Sensor type
Oxygen (O2)	0-25 %	0.1%	2-3 years	Electrochemical
Carbon Monoxide (CO-H2)	0 to 10000 ppm	1 ppm	3-5 years	Electrochemical
Nitric Oxide (NO)	0-5000 ppm	1 ppm	3-5 years	Electrochemical
Nitric Oxide (NO2)	0-1000 ppm	1 ppm	3-5 years	Electrochemical
Sulfur Dioxide (SO2)	0-5000 ppm	1 ppm	3-5 years	Electrochemical
Carbon Dioxide (CO2%)	0-40%	0.01%	>7 years	NDIR
Exhaust Temperature	0-1200 C	0.1 C	n/a	T/C
Pressure, Back pressure, differential pressure	-300 to 300 mbar	0.01 mbar	n/a	Piezoresistive
O2 reference 0-21 %				
NOx and CO automatically displayed in mg/m3 and or ppm with 5 % O2 reference				
Air Ratio (lambda)				
Display Unit : 3.5" TFT colour display with zoom function				
Data logging: Manual or automatic with data export in CSV format to SD card				
Battery (base unit & RCU unit) : internal Li-Ion rechargeable battery				
Communications: Blue tooth and mini USB port				
Printer: Built-in fast printer				
Probe: Special engine probe, 380 mm length with 2.7 mt Viton line with heat shield and heated head				
Case: Robust protective case and vinyl transport case				
Certification: MCERTS SIRA MC130233/01				

Some on-site application pictures



The wireless remote control unit is probably one of the most existing feature of the RASI 800 analyser.

It remotely controls all the functions of the analyser and display the measurements value on its large color display.

It promotes health and safety on site and reduce engine commissioning time.



The RASI 800 base unit shown measuring in the engine room while the operator comfortably adjust the engine parameters and test the emissions level by wearilessly reading the measured values on the RCU (wireless remote control unit).



The RASI 800 supplied ready to go with a special engine test probe, integrated protective case, and heat disk for probe protection.

RASI 700 Series

Combined biogas analyser and emissions tester



The combined analyser for service, commissioning engineers and biogas plants operators

The RASI 700 combines a Biogas analyser and an emissions testers in one truly compact hand held unit.

Available in 4 different configuration, the RASI 700 is the ideal analyser for engine service engineers, engine commissioning engineers and Biogas plants operators

Key Features:

- Use as gas analyser for O₂, CH₄, CO₂ and H₂S
- Use as emission tester for O₂, CO, NO, NO₂ (NO_x) readings from engine exhaust
- Specially designed engine probe
- Dedicated Task Menu
- Data logging and site management memory
- Bluetooth communication
- Measure pressure, differential pressure and "back pressure"
- Measure flow gas and Gas at the same time with special straight pitot tube

Measurement menu Gas measurements Pressure measurement Diff. temp. measurement Last measured values Start zeroing	Selection meas. program Engine exhaust Gas analyser User definable User definable Test program	Engine exhaust O ₂ [rel] 6.8 CO [mg/rel5%O ₂] 1200 NO _x [mg/rel5%O ₂] 525 T-gas [°C] 650.7 Air ratio 1.43 CO ₂ [%] 11.7	Gas analyser O ₂ [%] 0.4 H ₂ S [ppm] 123 CO ₂ [%] 34.37 CH ₄ [%] 47.02	Storage menu Sites administration Delete all sites Sites from SD card Sites onto SD card View measurements Delete measurements Measurements to SD card Memory info
---	--	---	---	---

TASK oriented and easy to navigate menu.

Select your application. Up to 4 tasks can be configured with instruments pre-settings.

Use as engine emissions tester.

Use as biogas analyser.

"Data Capture"

- Our new concept includes:
- Site Administration
 - Data Administration
 - Data Export on SD card
 - Automatic data logging

KIT selection

	Rasi 700 BIO	Rasi 700 KIT-00	Rasi 700 KIT-01	Rasi 700 KIT-02
Use as gas analyser	•			•
Use as emissions tester (exhaust gas analyser)		•	•	•
Measure O ₂ , CO ₂ %, CH ₄ %,H ₂ S from fuel gas	•			•
Measure O ₂ , CO, NO, NO ₂ (NO _x) from exhaust		•	•	•
Display value in mg/m ³ and ppm with O ₂ ref value as prescribed by the EA		•	•	•
Provide Lamba value, exhaust temperature, exhaust pressure and other engine parameters		•	•	•
Measure differential pressure	•	•	•	•
Data logging, data management, site management	•	•	•	•
Internal Rechargeable battery and USB charger	•	•	•	•
Real Time data transfer via blue tooth link	•	•	•	•
IRDA infrared printer	Option	•	•	•
Integrated Water Trap with filter	•	•	•	•
Supplied with 500 mm special engine probe, printer, carrying case		•	•	•
Biogas flow measurement (measure flow and gas sample at the same time)	Option	Option	Option	Option

RASI 700 Series

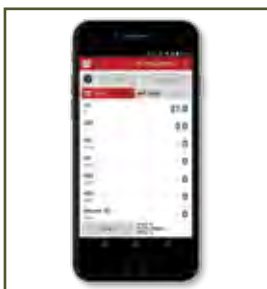
Combined biogas analyser and emissions tester

Specifications

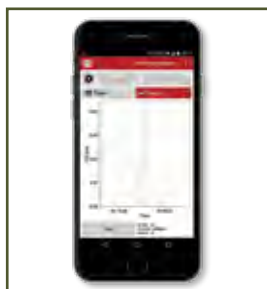
	Range	Resolution	Sensor life (typical)	Sensor type
Oxygen (O2)	0-25 %	0.1%	2 years	Electrochemical
Carbon Monoxide (CO-H2)	0 to 1000 ppm	1 ppm	3-5 years	Electrochemical
Nitric Oxide (NO)	0-5000 ppm	1 ppm	3-5 years	Electrochemical
Nitric Oxide (NO2)	0-1000 ppm	1 ppm	3-5 years	Electrochemical
Hydrogen Sulfide (H2S)	0-2500 ppm	1 ppm	3-5 years	Electrochemical
Methane (CH4)	0-100 %	0.01 %	>7 years	NDIR
Carbon Dioxide (CO2%)	0-100 %	0.01%	>7 years	NDIR
Exhaust Temperature	0-1200 C	0.1 C	n/a	T/C
Pressure, Back pressure, differential pressure	-300 to 300 mbar	0.01 mbar	n/a	Piezoresistive
Barometric Pressure	850 to 1150 mbar	0.1 mbar	n/a	Piezoresistive
Gas Velocity/Flow	1-100 m/sec	0.1 m/sec	n/a	n/a
O2 reference 0-21 %				
NOx and CO automatically displayed in mg/m3 and or ppm with 5 % O2 reference				
Air Ratio (lambda)				
Display: 3.5" TFT colour display				
Data logging: Manual or automatic with data export in CSV format to SD card				
Battery: internal Ni-MH rechargeable battery with USB charger				
Communications: Blue tooth and mini USB port				
Printer: IRDA fast infrared printer				
Probe: Special Engine Probe, 500 mm length with 2.7 mt Viton line with heat shield				
Case: Double wall case, with custom made closed foam for unit, probe and accessories				

Download the free MRU4U app *which turns your mobile into a gas analyser*

By using our **MRU4U** app you can safely stream, capture, save and share your gas analysis data. You can also now control and configure your analyser.



STREAM data to a safe location



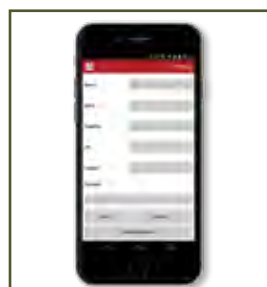
TREND data



SET the analyser



SAVE data and add notes



SHARE data



RASI901 SYN

Semi-continuous monitoring system for SYNGAS



RASI901 SYN is a portable gas analyser for semi-continuous monitoring of SYNGAS from many different processes

Key Features:

- Measure O₂% using Long Life EC sensor
- Measure CO₂%, CH₄% and CO% using NDIR sensor
- Measure H₂ % using TCD technology
- Integrated peltier gas cooler with condensate draining pump
- Strong Sample gas pump suitable for sampling on pressure and suction
- AUTO-CAL function
- Integrated printer
- Automatic measurement programme
- Data logging function with large data storage
- SD card, Bluetooth, RS232 and modbus communication
- Internal sample flow monitoring with alarms
- 8 x 4-20 mA analogue outputs

Some applications :

- Biomass or gasification
- Waste gasification, processes, plasma gasification
- Landfill
- Steam reforming
- Steel Industry: coke oven gas, blast furnace gas

Specifications

	Range	Resolution	Sensor life (typical)	Sensor type
Oxygen (O ₂)	0-25 %	0.01%	5 years	Electrochemical
Carbon Monoxide (CO)	0-10%/30%/100%	0.01 %	>10 years	NDIR
Methane (CH ₄)	0-10%/30%/100%	0.01 %	>10 years	NDIR
Carbon Dioxide (CO ₂)	0-10%/30%/100%	0.01%	>10 years	NDIR
Hydrogen (H ₂)	0-10%/100%	0,01%	>10 years	TCD Thermal conductivity
Calculated component	Calorific Value 0-50 MJ/m ³ or MJ/Kg, N ₂ balance			
Response Time	30 seconds from inlet			
Detection limit	0.05 %			
Repeatability	1% FS			
Linearity	1% FS			
Zero Drift/Span drift	Negligible/2% FS year			
Display	Large Backlight display, graphical			
Keyboard	Tactile keyboard , password protected calibration menu			
Outputs	8 x 4-20 mA outputs			
Data storage	Internal memory 8500 data, SD card			
Communication	RS232, RS485 Modbus RTU, Bluetooth			
Sample conditioning	Electric gas cooler with condensate draining pump			
	Teflon Particle filter, internal Viton Hosing			
	Optional special gas washing device for raw syngas			
	Monitored gas sample flow 60-80 l/hr			
	Sample Inlet pressure -200 to 100 mbar			
	Sample Venting to atmosphere			
Weigh/dimension/protection	7 KG/295 x 440 x 155 (H x W x D), IP21			
Power Supply	100-240 VAC, 47-63 HZ, 100W and Internal 12 VDC Ni-Mh battery			

SWG100 CEM

Continuous emissions analyser



Suitable for continuous monitoring of CHP engine exhaust emissions

The SWG100 CEM provide a cost effective and easy to install solution for continuous monitoring of CHP engine emissions. It is the perfect choice if you are required to monitor the engine in-between services.

Key Features:

- Electrochemical cells for O₂, CO, NO, NO₂ and SO₂
- NDIR sensors for CO₂% and HC ppm
- Provide emissions value in ppm, mg/m³ with variable O₂% reference
- Integrated gas cooler with condensate draining pump
- Heated sampling line for optimal NO₂ and SO₂ measurements
- Flow Controlled gas pump
- Multiple 4-20 mA outputs, profinet, profibus, modbus and ethernet industrial interfaces
- Unlimited data logging function on internal SD card

Specifications

Measurement components

Gas	Range	Type	Accuracy	Method
O ₂	0-25 %	EC	± 0,3 % Vol or 3% m.v	Continuous
CO (H ₂ comp)	0-10000 ppm	EC	± 0.3 % Vol or 3% m.v	Continuous
NO	0-25 %	EC	± 0,2% Vol	Continuous
NO ₂	0-200 ppm/1000 ppm	EC	± 5 ppm	Continuous & Discontinuous
SO ₂	0-2000 ppm/5000ppm	EC	± 5 ppm	Continuous & Discontinuous
CO ₂	0-5000 ppm/10000 ppm	EC	± 50 ppm	Continuous
HC	0-1 %	EC	± 20 ppm	Continuous
Display	3.5" TFT color display, back light			
Keyboard	Tactile keypad password protected menu			

Output communications & Data network connection

Analogue	Up to 40 x 4-20 mA output/input analogue channels (self powered), individually configurable for each gases, with hold last reading function and delay resume function (user selectable)
Alarms	Multiple (2 x 10) alarm relay output free contact 24VDC/5A
Data network connection	Modbus RTU as standard, optional ethernet, profinet, profibus dp and web enabled remote access

Sample

Gas inlet	Stainless steel gas fittings with 1/8" ID thread
Cooler	Integrated Peltier cooler with continuous condensate draining pump
Filter	Teflon particulate filter, Internal Viton hosing
Flow	Monitored and regulated flow 40...60 l/h
Pressure	Sample Inlet Pressure -100 mbar trough 300 mbar

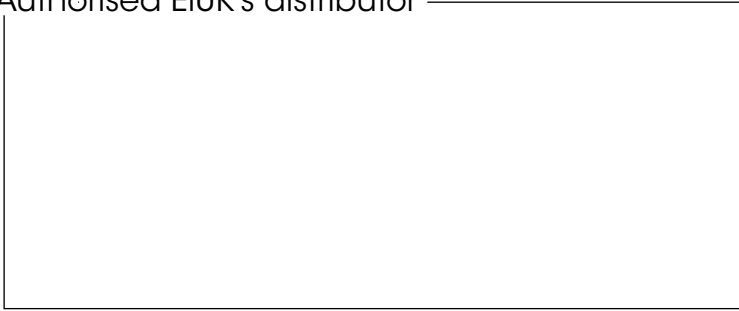
Physical

Dimension	600 x 600 x 210 mm (H x W x D) wall or rack mounting
Weight/protection	25 Kg, IP 54 standard version,
Operating temperature	+5 to 45 °C (-20 to 45 °C with optional heater)
Installation	Indoor or outdoor,
Heater	Cabinet heater 300 W
Mains/power	Universal 90-240 VAC/ 47...63 Hz, 90W



Emissions & calibration instruments

Authorised EiUK's distributor



Related Products

Portable Gas Detector

We are an authorised service centre and distributor for BW Technology. We offer stock items and 1 day service turnaround

Test Equipment

EiUK is also a leading manufacturer:

- Temperature and Pressure Calibrators for engine maintenance
- Hand held pressure indicator for gas measurements

Pressure Sensors

We are an authorised distributor for GE-Druck, a leading worldwide manufacturer of pressure sensors and transducers for many applications.



Eurotron instruments (UK) Ltd.

Unit 18 Austin Way
Royal Oak Industrial Estate
Daventry
Northants
NN11 8QT
England
T: +44 (0) 1327 871044
F: +44 (0) 1327 301255

sales@eurotron-uk.com
www.ei-uk.com



Sira Certificate No. MC130233/01



Certificate Number 9309
ISO 9001



Continuing development sometimes necessitates specification changes without notice.