

RASI 700 Industrial Flue Gas and Emissions Analyser



Bluetooth® connectivity and new mobile app.

The standard bluetooth® allows for real time data transfer to a PC or to an android base smart mobile device. The new free application speeds up your testing, keeps you away from dirty and noisy rooms and ensures data collection. There is no need anymore for long sampling lines or to stay close to the sampling points. Just enjoy the analyser readings from a more convenient location.



- Connect
- Start measuring
- Stop pump
- Save data
- Email data

IRDA fast printer

Our fast IRDA printer prints data faster than any other model available on the market. No feeding is required and changing paper rolls takes a matter of seconds. The print out header can be customised to reflect customer details, such as company name, contact name and telephone number.



The smallest hand held industrial flue gas emissions and gas analyser available today

Key Features

8 Gas Hand Held Analyser

This powerful industrial hand held unit can be used as a combustion analyser, emissions analyser or Biogas analyser.

Up to 8 measurement sensors can be installed at the same.

NDIR sensor for HC and CO2% stack emissions

New developed dual NDIR bench for direct CO2% measurement (instead of calculated) and HC in ppm value. NDIR technology for HC offer a much wider scope of applications compared to the traditional Pellistor type sensor as it does not require a minimum O2 level to function.

RASI 700 for BIOGAS and CHP's engines

RASI 700 is also available as a separate BIOGAS analyser for O2, CH4, CO2 and H2S or as a combined unit for measuring NOx and CO measurements from the exhaust gas engine.

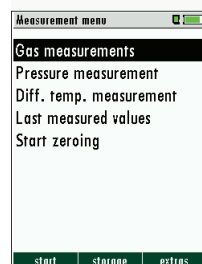
Measurements Capabilities		
•O2 LL	•CO	•Low CO
•NO	•NO2	•NOx
•Low NO	•CO%	•SO2
•CH4 %	•CO2% NDIR	•HC NDIR
•Smoke	•Flow	•Pressure
•Temperature	•Draught	Smoke

	Features	
	Standard	Option
Maximum 8 gases (not all configurations are possible)		
O2 sensor	•	
CO, NO, NO2, SO2, H2S, CO2%, HC, CH4%		•
CO sensor protection(mandatory if high and low CO is installed)		•
Large integrated and removable water trap	•	
Pressure, draught, temperature measurement	•	
Flow and Gas Velocity		•
Bluetooth, SD card, USB, IRDA and manual logging	•	
Auto data logging function		•
Fine draught 0.1 pa resolution for BIOMASS boiler testing		•
Sampling probes		•
Fast IRDA Printer (external)		•

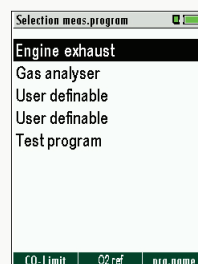
Simplified operation with the Intuitive Task Menu

The dedicated task menu gives direct access to your application. Simply select your "Task", i.e flue gas measurement, your measurement programme, for example "Engine Emissions " and analyser is ready to operate.

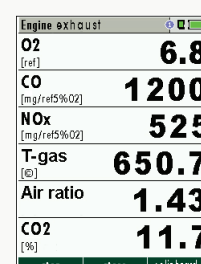
Up to 4 measurements programme can be configured with the desire settings such as O2% reference, fuel, practical order of the display measurements.



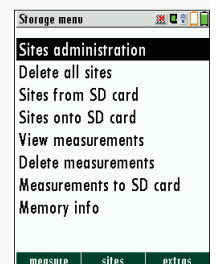
Select a Task



Select an Application



Start Measuring



Save Data

RASI 700 Industrial Flue Gas and Emissions Analyser

Specifications

	Range	Accuracy	Resolution	Sensor Type
O ₂	0-25 %	± 0.2% Vol abs	0.1% Vol	EC
CO(H ₂ compensated)	0-10000 ppm	± 10 ppm or ± 5% rdg up to 4,000 ppm ± 10 % rdg from 4,000 to 10,000 ppm	1 ppm	EC
CO	0-20000 ppm	± 100 ppm or ± 5% rdg up to 4,000 ppm ± 5 % rdg from 4,000 to 20,000 ppm	1 ppm	EC
CO %	0-10%	± 0.02% of rdg up to 4 % ± 10% of rdg up to 4 % to 10 %	0.01%	EC
Low CO(H ₂ compensated)	0-300 ppm	± 2 ppm or ± 5% reading	0.1 ppm	EC
NO	0-5000 ppm	± 5 ppm or ± 5% rdg up to 1,000 ppm ± 10 % rdg from 1,000 to 5,000 ppm	1 ppm	EC
Low NO	0-500 ppm	± 2 ppm or ± 5% reading	0.1 ppm	EC
NO ₂	0-1000 ppm	± 5 ppm or ± 5% rdg up to 200 ppm ± 10 % rdg from 200 to 1,000 ppm	1 ppm	EC
SO ₂	0-5000 ppm	± 10 ppm or 5% rdg up to 2,000 ppm ± 10 % rdg from 2,000 to 5,000 ppm	1 ppm	EC
H ₂ S	0-2500 ppm	± 5 ppm or ± 5% rdg up to 50 ppm ± 10 % rdg above 50 ppm	1 ppm	EC
1 GAS NDIR BENCH for emissions measurement				
CO ₂ %	0-40 %	± 0.3% vol or ± 5% rdg	0.01% Vol	NDIR
2 GAS NDIR Bench for emissions measurement				
CO ₂ %	0-40 %	± 0.5% vol or ± 3% rdg	0.01% Vol	NDIR
HC	0-40.000 ppm	± 100 ppm	100 ppm	NDIR
2 GAS NDIR Bench for Gas Measurement				
CH ₄	0-100 %	± 0.2% Vol or ± 3% rdg	0.01%	NDIR
CO ₂	0-100 %	± 0.3% Vol or ± 3% rdg	0.01%	NDIR
Temperature and Pressure				
Gas Temperature	-50-1700 °C	± 2 °C	0.1 °C	TC type K/S
Air Temperature	-50 °C to 100 °C	± 1 °C	0.1 °C	TC Type K
Draught/Diff Pressure	-100 to 100 hPa	± 0,02 hPa	0.01 hPa	Piezoresistive
Flow Velocity	3 to 100 m/sec	± 1 m/sec or ± 3 % of rdg	0.1 m/sec	Pitot Tube
Calculations				
Efficiency	0 to 120 %		0.1 %	Calculated
Air Ratio	1 to 9.99		0.01	Calculated
Excess Air	0 to 99.9%		0.1%	Calculated
Heat losses	0 to 99.9 %		0.1%	Calculated
CO ₂ % (when CO ₂ % NDIR not installed)	0 to CO ₂ % max	± 0.3% vol	0.1%	Calculated
Fuel Selection	Most common fuels plus user definable			
Emissions Calculations	Oxygen normalization, automatic conversion ppm, mg/m ³ for all toxic gas			
Memory, data capture and communication				
Storage medium	16000 logs on internal memory, 2GB on standard SD card, Data export to CSV file from SD card			
Digital communications	USB, Bluetooth®			
General				
Gas Sample Preparation	Integrated replaceable water trap			
Display	3.5 "TFT colour display, 6 lines, full graphic			
Weight, Dimension (W x L x H)	750 g, 110x225x52 mm			
IP protection	IP21			
Power/Mains	Ni-Mh Internal rechargeable batteries, OPtional LHON , AC 100-250 VAC, 47-63 Hz			
Operating/Storage Temperature	5 to 45 °C / -20 to 50 °C			
Warranty	2 years instruments 1 year CO, NO,NO ₂ ,SO ₂ ,H ₂ S, cells, 2 years O ₂ cell, 2 years NDIR			

RASI 700 Industrial Flue Gas and Emissions Analyser

RASI 700 Engine Exhaust Gas analyser



The RASI700 engine Kit is the ideal tool for service and commissioning engineers working on CHP stationary engines. The Kits comes with all the accessories to operate, and it is installed with:

- O₂, CO, NO and NO₂ cells
- Engine sampling probe
- Read in ppm and mg/m³ with O₂ reference
- IRDA printer
- Blue Tooth
- Carrying Case
- Adds on:
 - CO₂%, CH₄% and H₂S measurement for gas sample.

How to order

to make your selection please state the following:

- Gas to be measured (the analyser comes standard with O₂ cell only)
- Maximum 6 electrochemical cells and one NDIR bench can be installed at the same time
- Probe length
- Temperature of the stack

When selecting your analyser, please consider a few important factors:

- True NO_x require both NO and NO₂ measurement cells installed. Most of industrial application will require NO₂ cell installed to provide correct NO_x reading
- CO₂ % calculated values which are fuel dependant can be very erratic. Your application might require an NDIR infrared sensor (ie stack emissions, CHP engines, Cement plants)

Euuk offer a large selection of gas sampling probes to match your application. All our probes are supplied with a special Viton line to eliminate sample absorption and to increase the analyser response time. A choice of standard or industrial probes is outlined below.

Standard Gas Sampling Probe

The standard sampling probe is available in different lengths and different materials. It comes complete with integrated thermocouple for temperature readings and positioning cone. More that one probe shaft can be ordered.



Probe Shaft Stainless Steel: Tmax 850 °C
lengths: 360, 500, 750 mm, 1m, 1.5m, 2 m

Probe Shaft Inconel 600: Tmax 1200 C
lengths: 500, 750mm, 1m, 1.5 and 2m

Special Hose for gas sampling and continuous pressure measurement

Special Viton line for eliminating sample absorption (optimal for NO₂/SO₂)
Hose length: 2.7 or 5 mt

Gas Sampling Probes

Engine Probe

The engine probe is specifically designed for sampling on gas or diesel CHP engines: It features

- Special Viton hose for maximum NO₂ accuracy
- Temperature measurement
- Back Pressure measurements
- Special positioning cone spring loaded



Probe Shaft Stainless Steel: Tmax 1200 °C
lengths: 360, 500,

Special Hose for gas sampling and continuous pressure measurement

Special Viton line for eliminating sample absorption (optimal for NO₂/SO₂)
Hose length: 2.7



Online View Software

Supplied as standard with the analyser, this power full software allow you to view data in real time on a laptop or PC. Data are displayed in TEXT, GRAPHICAL or BAR format. The software automatically saves and creates an excel file of the measurement taken. Communication is established via blue tooth or USB port.



Data Management

Save time and ensure traceability. Simply upload your sites and log measurement values under each site:

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



Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.



UK Office

Keison Products,

P.O. Box 2124, Chelmsford, Essex, CM1 3UP, England.

Tel: +44 (0)330 088 0560

Fax: +44 (0)1245 808399

Email: sales@keison.co.uk

Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.