

Technical Data Sheet

Pressure / Temperature / Humidity / Air Velocity / Airflow / Sound level

Kimo Kigaz 150 Combustion Gas Analyzer

KIGAZ 150 **COMBUSTION GAS ANALYSER**





Protection of sensors by pump stopping



Interchangeable O₂ and ${\rm CO\text{-}H}_{\scriptscriptstyle 2}$ sensors

MENUS / ACTIVE VIEW





Supplied with magnetic

protective cover

Analyser menu

Example of analysis

KEY POINTS

- 2 Go memory (100 000 measurements)
- Step-by-step procedure (gas flow,...)
- Autodiagnostic menu
- External printer (optional)
- User management



INSTRUMENT FEATURES

GAS	Ambient CO max	Flue gas CO	Interchangeable sensors : O ₂ and CO compensated H ₂	Excess air Losses	Efficiency > 100%
PRESSURE	Differential pressure measurement	Draft measurement			
TEMPERATURE	Ambient temperature	Flue gas temperature	Delta Temperature	DHW temperature	Dew point temperature
OTHERS FUNCTIONS	15 programmed combustibles ¹	Adding 5 combustibles by the user	Automatic measurements	Opacity index	External water trap

[†]Combustibles: Sahara/Fos-sur-Mer Natural Gas, Groningen Natural Gas, Russia/North Sea Natural Gas, Propane, LPG, Butane, Light Oil, Heavy Oil, Bituminous coal, Hard coal, Coke gas, Bio fuel 5%, Wood 20%, Wood-chip 21%, Pellet 8%

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HOUSING

Dimensions

Instrument: 331 x 112 x 86 mm Flue gas probe: 180 mm Cable length: 2.50 m

Weight (battery included)

680 g

Display

Grey scale 3.5" display

Keypad

10 keys dome switch keypad

Material

Housing and probe: ABS Probe cable: neoprene

Protection

IP40

PC interface

USB

Bluetooth® (optional) Infrared (printer)

Power supply

Li-Ion 3,6V 4400 mA battery

Battery life

10 h in continuous operation

Use and storage temperature

From -5 to +50°C and from -10 to +50°C

MEASURING RANGE

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Parameter Sensor Measuring range			Resolution	Accuracy*
	3311331	Measuring range		·
0,	Electro-chemical	from 0% to 21%	0.1% vol.	±0.2% vol.
CO (with H ₂ compensation)	Electro-chemical	from 0 to 8000 ppm	1 ppm	From 0 to 200 ppm : ±10 ppm From 201 to 2000 ppm : ±5% of the measured value From 2001 to 8000 ppm : ±10% of the measured value
Flue gas temperature	K thermocouple	from -100 to +1250°C	0.1°C	±1.1°C or ±0.4% of measured value
Ambient temperature	Internal NTC	From -20 to +120°C	0.1°C	±0.5°C
Ambient temperature	Pt100 (1/3 Din external probe)	From -50 to +250°C	0.1°C	±0.3% of the measured value ±0.25°C
Dew point temperature	Calculated**	From 0 to +99°Ctd	0.1°C	
DHW temperature	TcK (external probe)	From -200 to +1300 °C	0.1°C	±1.1°C or ±0.4% of measured value
Differential pressure Draft	Semiconductor	From -200 to +200 hPa	0.01 hPa	From -200.00 to -1.00 hPa : $\pm 0.5\%$ of the measured value +0.045 Pa From -1.00 to -0.40 hPa : $\pm 5\%$ of the measured value From -0.40 to 0.40 hPa : ± 0.02 hPa From 0.40 to 1.00 hPa : $\pm 5\%$ of the measured value From 1.00 to 200.00 hPa : $\pm 0.5\%$ of the measured value + 0.045 hPa
Losses	Calculated**	From 0 to 100%	0.1%	
Excess air (λ)	Calculated**	From 1 to 9.99	0.01	
Lower efficiency (ηs)	Calculated**	From 0 to 100%	0.1 %	
Higher efficiency (ηt) (condensing)	Calculated**	From 0 to 120%	0.1%	
Opacity index	External instrument	From 0 to 9		

^{*}All accuracies indicated in this document were stated in laboratory conditions and can be guaranteed for measurements carried out in the same conditions, or carried out with required compensation.
**Calculation is made based on the measured values by the analyzer.

SOFTWARE

Analysers are supplied with LIGAZ software allowing database creation (Customers, Boilers, inspections), downloading and printing inspections and analyser configuration.

SUPPLIED WITH

The analysers are supplied with the following items:

• Differential pressure kit including 2 x 1 m of silicone tube

- Transport bag
- 180 mm flue gas probe and its water trap
- LIGAZ software and its USB cable
- · Mains adapter
- Calibration certificate
- Magnetic protective cover



Transport bag

REFERENCES

• KIGAZ150 : combustion analyser with 2 sensors (O $_{\! 2}$ and CO-H $_{\! 2}$

OPTIONS

• SCOT: ambient CO probe

• SCO2T : ambient CO, probe

• SPA 150SP: ambient Pt100 probe

• SKCT : contact probe for pipes

• SDFG : gas leak detection probe (CH₄)

• KEG: gas network tightness kit

• PMO: opacity pump

• Bluetooth® module : data downloading and device configuration

• **SCI**: Measurement probe of ionisation current

KDIP: External printer

