

## **Technical Data Sheet**

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

# KIGAZ 150 **COMBUSTION GAS ANALYSER**





Protection of sensors by pump stopping



Interchangeable O, and CO-H, sensors

**KEY POINTS** 

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



combustibles 1

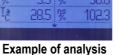
#### **INSTRUMENT FEATURES**

MENUS / ACTIVE VIEW						
1	03/10/11		03/10/11 13:55:26			
Accueil	Gaz	Gaz naturel				
Mesures	%	4.3 It	52.6			
Configuration	CO ppm	0 ×	1.26			
Clients	• CO2	9.3 %	98.8			
Infos	, Ta ℃	28.5 %	102.3			
		+				

Supplied with magnetic

protective cover

Analyser menu



GAS Ambient CO Flue gas CO Interchangeable Excess air Efficiency > sensors :  $O_2$  and CO 100% max Losses compensated H PRESSURE Differential Draft pressure measurement measurement **TEMPERATURE** Ambient Flue gas **Delta Temperature** DHW Dew point temperature temperature temperature temperature **OTHERS** External 15 Adding 5 Automatic Opacity **FUNCTIONS** programmed combustibles measurements index water trap

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<sup>®</sup> (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 -20 to +50°C

<sup>1</sup>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%

by the user

#### **MEASURING RANGE**

Parameter	Sensor	Measuring range	Resolution	Accuracy*
0,2	Electro-chemical	from 0% to 21%	0.1% vol.	±0.2% vol.
CO (with H <sub>2</sub> compensation)	Electro-chemical	from 0 to 8000 ppm	1 ppm	From 0 to 200 ppm : $\pm$ 10 ppm From 201 to 2000 ppm : $\pm$ 5% of the measured value From 2001 to 8000 ppm : $\pm$ 10% of the measured value
Flue gas temperature	K thermocouple	from -100 to +1250°C	0.1°C	$\pm$ 1.1°C or $\pm$ 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	$\pm 0.3\%$ of the measured value $\pm 0.25^{\circ}C$
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	$\pm$ 1.1°C or $\pm$ 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 : $\pm 0.02$ 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

#### REFERENCES

• KIGAZ150 : combustion analyser with 2 sensors (O<sub>2</sub> and CO-H<sub>2</sub>)

#### OPTIONS

- SCOT : ambient CO probe
- SCO2T : ambient CO<sub>2</sub> probe
- SPA 150SP : ambient Pt100 probe
- SKCT : contact probe for pipes
- SDFG : gas leak detection probe (CH<sub>4</sub>)
- KEG : gas network tightness kit
- PMO : opacity pump
- Bluetooth<sup>®</sup> module : data downloading and device configuration
- SCI : Measurement probe of ionisation current
- KDIP : External printer

### External printer



EXPORT DEPARTMENT Tel : + 33. 1. 60. 06. 69. 25 - Fax : + 33. 1. 60. 06. 69. 29 e-mail : export@kimo.fr Distributed by :

Transport bag



