

## Combustion gas analyser KIGAZ 80

### KEY POINTS

- 2 Go memory (100 000 measurements)
- Step by step procedure menu (gas flow, inspections)
- Self-test menu
- External infra-red IRDA® printer (optional)



### CONFORMITY AND STANDARDS

#### Conformity

The analyser is in compliance with the following european directives:

- 2004/108/EC
- 2006/95/EC Low voltage
- 2011/65/EU RoHS II
- 2012/19/EU WEEE

#### Standards

The analyser is in compliance with the EN 50379-1 and EN 50379-2 standards.



KIGAZ MOBILE  
Application

### HOUSING

#### Dimensions

Instrument: 240 x 100 x 80 mm  
Flue gas probe: 180 mm

#### Keypad

10 keys  
Dome switch keypad

#### Protection

IP40

#### Battery life

10 h in continuous operating

#### Weight (battery and protective cover included)

660 g

#### Material

Housing: ABS  
Probe cable: neoprene  
Probe: PA 6.6 reinforced  
10% glass fiber

#### PC communication

Bluetooth® (optional)  
USB  
Infra-red IRDA® (printer)

#### Battery charging time

10 h

#### Display

Graphic screen  
Active view dimensions: 54 x 50 mm

#### Power supply

Li-Ion battery 6 V 1.5 A

#### Operating and storage temperature

From +5 to +50°C and from -20 to +50°C  
Altitude: from 0 to 2000 m

### FEATURES OF THE INSTRUMENT

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

<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%

## MEASURING RANGE

Parameter	Sensor	Measuring range	Resolution	Accuracy*	T <sub>90</sub> response time
O <sub>2</sub>	Electro-chemical	From 0% to 21%	0.1% vol.	±0.2% vol.	30 s
CO (with H <sub>2</sub> compensation)	Electro-chemical	From 0 to 8000 ppm	1 ppm	From 0 to 200 ppm: ±10 ppm From 201 to 2000 ppm: ±5% of measured value From 2001 to 8000 ppm: ±10% of measured value	30 s
Flue gas temperature	K thermocouple	From -100 to +1250°C	0.1°C	±0.4% of measured value or ±1.1°C	45 s
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 measured value ±0.25°C	30 s
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	±0.4% of measured value ±1.1°C	-
Differential pressure	Semiconductor	From -20 000 to +20 000 Pa	1 Pa	From -20 000 to -751 Pa: ±0.5% of measured value ±4.5 Pa From -750 to -61 Pa: ±0.9% of measured value ±1.5 Pa From -60 to 60 Pa: ±2 Pa From 61 to 750 Pa: ±0.9% of measured value ±1.5 Pa From 751 to 20 000 Pa: ±0.5% of measured value ±4.5 Pa	-
Draft		From -10 to +10 Pa From -1000 to +1000 Pa	0.1 Pa 1 Pa		
Losses	Calculated**	From 0 to 100%	0.1%	-	-
Excess air (λ)	Calculated**	From 1 to 9.99	0.01	-	-
Lower efficiency (η <sub>s</sub> )	Calculated**	From 0 to 100%	0.1%	-	-
Higher efficiency (η <sub>t</sub> ) (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.

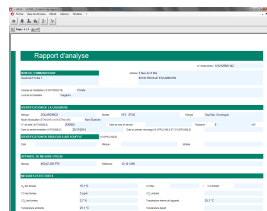
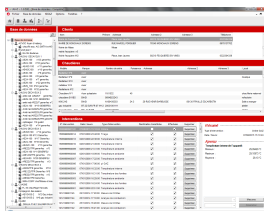
\*\*Calculation is made based on the measured values by the analyser.

## SOFTWARE



### The analysers are supplied with the LIGAZ-2 software

It allows database creation (customers, boilers, inspections), inspections downloading and printing, synchronisation instrument/PC and analyser configuration.



## SUPPLIED WITH

The analysers are supplied with the following items:

- Transport bag
- 180 mm flue gas probe and its water trap
- LIGAZ-2 software and its USB cable
- Power supply adapter and Li-ion battery
- Calibration certificate
- Protective cover with magnets



## OPTIONS



- SCOT: ambient CO probe



- SCO2T: ambient CO<sub>2</sub> probe



- SPA 150SP: Pt100 ambient probe



- SKCL 150: thermocouple probe



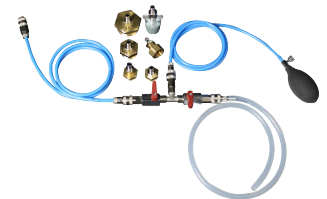
- SDFG: Gas leak detection probe (CH<sub>4</sub>)



- SCI: Ionisation current measurement probe



- PMO: Opacity pump  
Supplied with 50 filters and a reference table



- KDIP-2: Infra-red IRDA® printer

- KEG: Gas network tightness kit

**Bluetooth** module

**KIGAZ MOBILE Application**  
For smartphones and tablets

Allows connection to the KIGAZ MOBILE application:

- Graphic visualisation
- Saving
- Exportation under CSV, XML, PDF format
- Reports sending by e-mail

\*See the technical datasheet of accessories for KIGAZ for more details.

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Tel : + 33. 1. 60. 06. 69. 25 - Fax : + 33. 1. 60. 06. 69. 29

e-mail : [export@kimo.fr](mailto:export@kimo.fr)