

**KIMO**<sup>®</sup>  
INSTRUMENTS



# Combustion Gas analysers

Gas analysis / Temperature / Pressure

# KIGAZ Combustion

**NEW PRODUCT**

Ergonomics  
and technology  
dedicated  
to your job.



TÜV-SÜD Approved  
EN50379 - 1&2  
(/\$5.5 / \$5.6 / \$5.7)



Optimum efficiency  
to reduce pollutant emissions

## KIGAZ 150



Page 04

**EASY ANALYSIS**

**2**  
interchangeable  
**sensors**

## KIGAZ 100



Page 05

**EFFICIENT ANALYSIS**

**2**  
interchangeable  
**sensors**

Up to

**4**  
interchangeable  
**sensors**

**O<sub>2</sub> / CO-H<sub>2</sub> / CH<sub>4</sub> / NO / NO<sub>2</sub> / SO<sub>2</sub>**



**15** programmed  
**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%



## KIGAZ 200



Page 06

### CUSTOM ANALYSIS

Up to **3**  
interchangeable  
sensors

## KIGAZ 300



Page 08

### SMART ANALYSIS

Up to **4**  
interchangeable  
sensors

## SOLUTION

FOR ANY TYPE OF BOILERS

A maximum efficiency and the safety of installation are the key points to guarantee an efficient and controlled combustion.

We have developed a new range of combustion gas analysers, which fulfil all needs of heating professionals. Our analysers are scalable and offer many solutions for any type of boilers, to control pollutant emissions.

**QUALITY:** All KIGAZ instruments are supplied with a certificate  
KIGAZ 150. . . . . adjustment certificate  
KIGAZ 100 | 200 | 300. . . . . calibration certificate

Page 10

### LIGAZ / LOGAZ

Softwares for  
measurement assistance



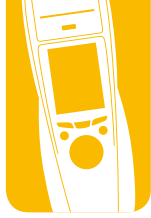
Bluetooth™  
Communication



Page 11

### KIGAZ REFERENCES

Accessories and  
external probes



# Combustion gas analyser KIGAZ 150

## Easy analysis



Supplied with  
ADJUSTMENT  
certificate



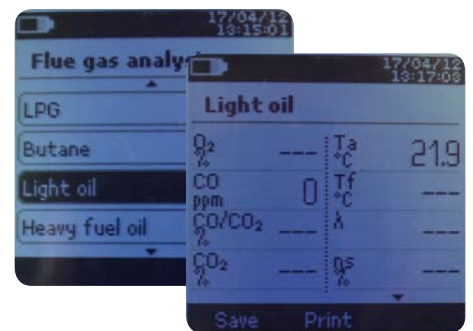
**SOLUTION**  
THE BASE SOLUTION  
24 cm

## Common features KIGAZ 150 and KIGAZ 100

Protection of sensors by  
pump stopping



The **KIGAZ 150** model is compact and light, it is perfectly suitable to the study of the main check points of any type of boilers.



Menus and example  
of analysis

THERMAL  
PAPER  
**10-year**  
guarantee



External printer - option (p.11)



Protective cover with  
magnet for KIGAZ 150

### KIGAZ 150 and 100

Parameters	Sensors	Measuring range
<b>O<sub>2</sub></b>	Electro-chemical	0 to 21 %
<b>CO (with H<sub>2</sub> compensation)</b>	Electro-chemical	0 to 8000 ppm
<b>Flue gas temperature</b>	K Thermocouple	-100 to +1250°C
<b>Ambient temperature</b>	NTC	-20 to +120°C
<b>Ambient temperature</b>	Pt100	-50 to +250°C
<b>Pressure draft</b>	Semiconductor	±200 hPa
<b>Efficiency (condensing)</b>	Calculated*	0 to 120 %

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



# Combustion gas analyser KIGAZ 100



**2**  
interchangeable  
sensors

## Efficient analysis

Protective cover  
with magnet

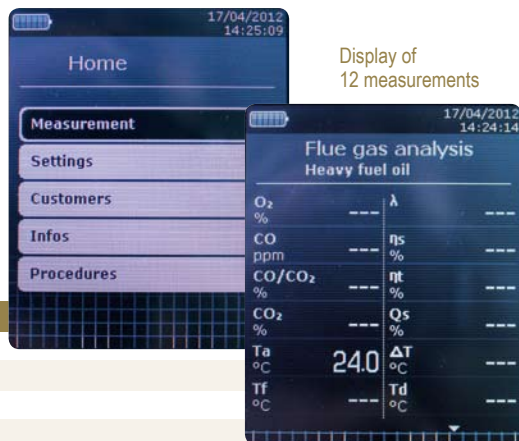
**DHW network** (external TcK probe)  
from -20 to +90°C

Printer  
**KIGAZ 150** ..... external (option)  
**KIGAZ 100** ..... integrated

Interchangeable  
**O<sub>2</sub> / CO-H<sub>2</sub>** sensors

- Autodiagnostic menu
- 100 000 measurements
- Reports printing
- Efficiency up to 120 %
- Simultaneous display of measurements
- Battery life: 10h in continuous operation
- External probe (option)

**The KIGAZ 100** is the key tool for a fast check of any type of boilers. Easy to use and light, it allows the study of the main check points.



**Supplied with:**  
Transport bag  
LIGAZ software  
Adjustment certificate (KIGAZ 150)  
Calibration certificate (KIGAZ 100)  
Protective cover with magnet



Protective cover with magnet for KIGAZ 100





# Combustion gas analyser KIGAZ 200

Up to **3**  
**interchangeable**  
**sensors**

## Custom analysis



Interchangeable  
 $O_2$  /  $CO-H_2$  /  $NO$  /  $CH_4$   
sensors



Autozero  
in the flue

Integrated  
printer



Reports  
printing



Protective cover  
with magnet

## Characteristics

- Interchangeable probe
- Customized procedure
- Up to 12 measurements displayed simultaneously (choice of 3, 6, 12)
- LED on probe handle to light dark areas

With its large display, and its icon browsing system, the **KIGAZ 200** simplifies your measurement process. Scalable and accurate, it offers many type of measurements that you can configure according to your needs.

**Supplied with:**  
Transport bag  
LIGAZ software  
Calibration certificate  
Protective cover  
with magnet



## KIGAZ 200

Parameters	Sensors	Measuring range	Parameters	Sensors	Measuring range
$O_2$	Electro-chemical	0 to 21 %	<b>Draft pressure</b>	Semiconductor	$\pm 200$ hPa
<b>CO (H<sub>2</sub> compensation)</b>	Electro-chemical	0 to 8000 ppm	<b>Losses</b>	Calculated*	0 to 100 %
<b>Flue gas temperature</b>	K Thermocouple	-100 to +1250°C	<b>Flue gas velocity</b>	Calculated*	0 to 99,9 m/s
<b>Ambient temperature</b>	NTC	-20 to +120°C	<b>Excess air</b>	Calculated*	1 to 999 %
<b>Ambient temperature</b>	Pt100	-50 to +250°C	<b>Efficiency (condensation)</b>	Calculated*	0 to 120 %

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

## Connections



Front view      Rear view

**Protective cover with magnet**



Thermocouple connections      External probe connection (Pt100 temperature, CH<sub>4</sub> ...)

**Top view**

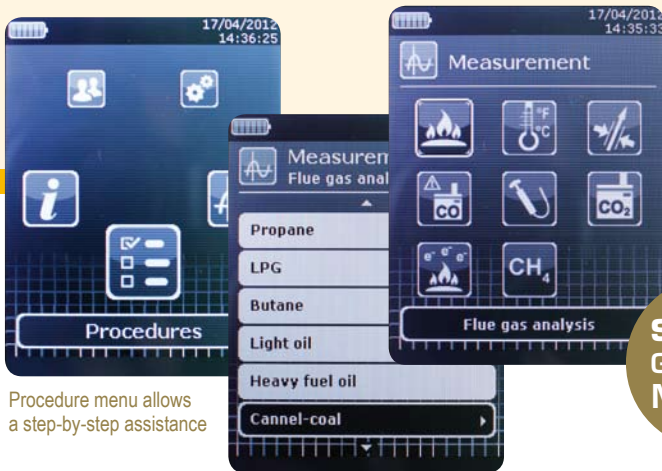


Flue gas connection  
P-      P+ pressure plug

**Bottom view**



**CO sensor protection by solenoid valve**



Procedure menu allows a step-by-step assistance

**SMART GRAPHIC MENU**



## Additional Applications



Gas network kit

- ✓ **Verification of DHW network**  
Domestic Hot Water  
Use special velcro and piping probes
- ✓ **Gas network verification**

- ✓ **CO control**  
Other remote probes on page 11.
- ✓ **Verification of ionisation current**  
Multimeter function





# Combustion gas analyser KIGAZ 300

Up to **4**  
interchangeable  
**sensors**



**O<sub>2</sub> / CO-H<sub>2</sub> / CH<sub>4</sub> / NO / NO<sub>2</sub> / SO<sub>2</sub>**  
sensors  
in standard or option



**Integrated**  
Water trap

Any type  
of boilers



**Vocal**  
Help

Autozero  
in the flue



**CO**  
Dilution

## Smart analysis Features

- Customized procedures
- CO dilution
- Simplified water discharge
- Optional: probe up to 1000°C



**SMART  
GRAPHIC  
MENU**

**The KIGAZ 300** is the most comprehensive instrument of the range. It can be customized and can be adapted to any specific dataset. You save time and you improve your work conditions, thanks to its vocal support and to the lighting LED for dark rooms.

Supplied with  
**CALIBRATION**  
certificate

Parameters	Sensors	Measuring range	Parameters	Sensors	Measuring range
<b>O<sub>2</sub></b>	Electro-chemical	0 to 21 %	<b>Losses</b>	Calculated*	0 to 100 %
<b>CO (H<sub>2</sub> compensation)</b>	Electro-chemical	0 to 8000 ppm	<b>Flue gas velocity</b>	Calculated*	0 to 99,9 m/s
<b>Flue gas temperature</b>	K Thermocouple	-100 to +1250°C	<b>Excess air</b>	Calculated*	1 to 999 %
<b>Ambient temperature</b>	NTC	-20 to +120°C	<b>Efficiency (condensation)</b>	Calculated*	0 to 120 %
<b>Ambient temperature</b>	Pt100 (external probe)	-50 to +250°C	<b>Opacity index</b>	External instrument	0 to 9
<b>Dew point temperature</b>	Calculated*	0 to 99°Ctd	<b>Dilution</b>	Electro-chemical	0,8 to 5 %
<b>Draft</b>	Piezoelectric	±1000 Pa	<b>CH<sub>4</sub></b>	Semiconductor	0 to 10 000 ppm
<b>Differential pressure</b>	Piezoelectric	±200 mbar	<b>T DHW</b>	Tck (external probe)	-20 to +90°C

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





DHW network



Measuring of ambient CO



## CO dilution



Memory



Integrated printer

Printing of maintenance certificate of the instrument

- 2 thermocouple inputs
- 1 input for external probe
- Ambient CO / Gas leak / Temperature



Protective magnetic cover



Pressure

### 3 pressure sensors

- Differential pressure measurement
- High accuracy draft measurement with autozero by solenoid valve
- Measurement of the suction pump flow



**Supplied with:**  
 Transport case  
 LIGAZ software  
 Calibration certificate  
 Protective cover with magnet



**THERMAL PAPER**  
**10-year guarantee**



**All our datasheets**  
 available on [www.kimo.fr/gas](http://www.kimo.fr/gas)



# Software LIGAZ | LOGAZ



Bluetooth™  
Communication

Professional | solutions

ASSISTANCE FOR MEASUREMENT



KIMO simplifies  
your daily life

Configure

Schedule

Control

Process



**LIGAZ**

Supplied in standard with all **KIGAZ**



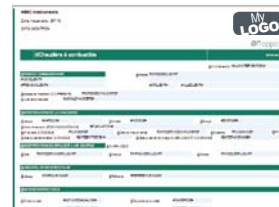
**LOGAZ**

Optional software for **KIGAZ 200 / 300** models



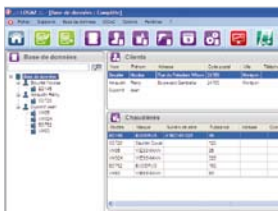
**CONFIGURE  
YOUR ANALYSER**

Connect the KIGAZ via USB  
or Bluetooth™ connection.



**REPORTS**

Easy reading of measurement  
reports. Customize, print and  
export your files.



**DATABASE MANAGEMENT**

Record your customers,  
boilers and measurements  
records.



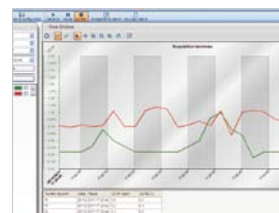
**CHECK SCHEDULE**

Organize your agenda,  
maintenance contracts,  
clients follow-up.



**PRINTING**

Download your datasets  
and the programme will  
automatically fill in the  
measurement report.



**ONLINE MODE**

Display and recording of  
measurements in real-time.





## KIGAZ 150 | 100 | 200 | 300

Legend: ✓ Standard • Option - Not available

References	Description	150	100	200STD	200PRO	300CLA	300STD	300PRO
<b>Interchangeable sensors</b>								
<b>CI-O2</b>	O <sub>2</sub> from 0 to 21 %	✓	✓	✓	✓	✓	✓	✓
<b>CI-CO<sub>2</sub></b>	CO-H <sub>2</sub> from 0 to 8000 ppm	✓	✓	✓	✓	✓	✓	✓
<b>CI-NO</b>	NO from 0 to 5000 ppm	-	-	•	✓	•	✓	✓
<b>CI-NO<sub>2</sub></b>	NO <sub>2</sub> from 0 to 1000 ppm	-	-	-	-	•	•	✓ or
<b>CI-SO<sub>2</sub></b>	SO <sub>2</sub> from 0 to 5000 ppm	-	-	-	-	•	•	✓
<b>CI-CH<sub>4</sub></b>	CH <sub>4</sub> for gas detection from 0 to 10 000 ppm	-	-	•	•	•	•	•
<b>Flue gas probes</b>								
<b>PSK-180</b>	L 180 mm up to 500°C	✓	✓	•	•	•	•	•
<b>PSK-300</b>	L 300 mm up to 500°C	-	-	✓	✓	✓	✓	✓
<b>PSK-750</b>	L 750 mm / inconel up to 1000°C	-	-	•	•	•	•	•
<b>PSF-1</b>	Flue gas probe with handle, 6m cable, water trap	-	•	-	-	-	-	-
<b>PSF-2</b>	Flue gas probe with handle, 6m cable, water trap	-	-	•	•	-	-	-
<b>PSF-3</b>	Flue gas probe with handle, 6m cable, water trap	-	-	-	-	•	•	•
<b>SF6-15</b>	Fixed flue gas probe with handle, 6m cable, water trap	•	-	-	-	-	-	-
<b>Accessories</b>								
<b>KDIP</b>	External printer	•	-	-	-	-	-	-
<b>KEG</b>	Gas network tightness kit	•	•	•	•	•	•	•
<b>PMO</b>	Opacity pump	•	•	•	•	•	•	•
<b>MAK</b>	Aluminium transport case	•	•	•	•	•	•	•
<b>MABS</b>	ABS transport case	•	•	•	•	✓	✓	✓
<b>MB-123</b>	Bluetooth™ module	•	•	•	•	•	•	•
<b>LOGAZ</b>	Exploitation software	-	-	•	•	•	•	•



## External probes additional measures



**SCI**  
Ionisation current  
measurement probe

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

**SCOT**  
Ambient CO probe

**SCO<sub>2</sub>T**  
Ambient CO<sub>2</sub> probe

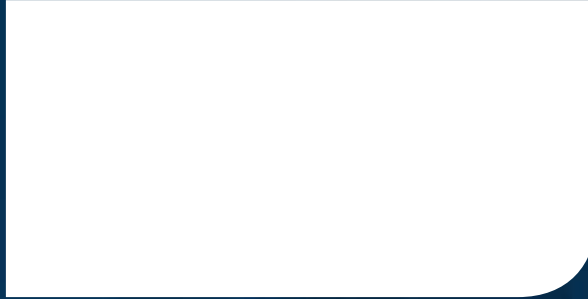
**SPA 150 SP**  
Ambient Pt100 probe

**SKCL 150**  
Thermocouple probe with lamella

**SKV 150**  
Velcro thermocouple K probe for ducts

**SKCT**  
Thermocouple probe  
with lamella contact and spring  
for pipes

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