

Technical Data Sheet

MENUS / ACTIVE VIEWS

Analyser

menus

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

KIGAZ 100 Combustion Gas Analyser



Protection of sensors by pump stopping



Supplied with magnetic protective cover

KEY POINTS

- Protection of sensors by pump stopping
- Interchangeable CO and COH, sensors
- 2 Go memory (100 000 measurements)
- Step-by-step procedure
- Self-test menu

INSTRUMENT FEATURES

GAS	Ambient CO max	CO flue gas	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

¹Combustibles : 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%



HOUSING

99.0

05.0

23.5 42 9

1.30 ppm (

Example of

analysis

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

Weight (battery included) 900 g

Display Grey scale 3.5" display

Keypad 10 keys dome switch keypad

Material Housing and probe : ABS Probe cable : neoprene

Protection IP40

+50°C

PC interface USB Bluetooth[®] (optional)

Power supply Li-lon 3,6V 4400 mA battery

Battery life 10 h in continuous operating

Use and storage temperature From -5 to +50°C and from -10 to

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 ₂ 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	$\pm 1.1^{\circ}$ 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	$\pm 1.1^{\circ}$ 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 : ± 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

• KIGAZ100 : combustion analyser with 2 sensors (O2 and CO-H2)

OPTIONAL¹

- SCOT : ambient CO probe
- SCO2T : ambient CO₂ 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



¹Please see the technical datasheet of accessories for kigaz for further details

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