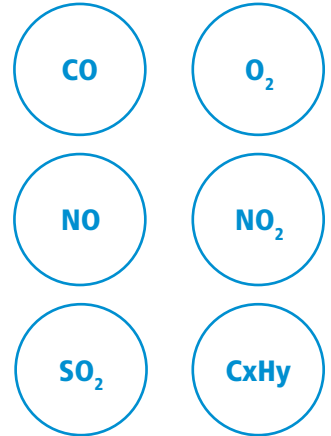
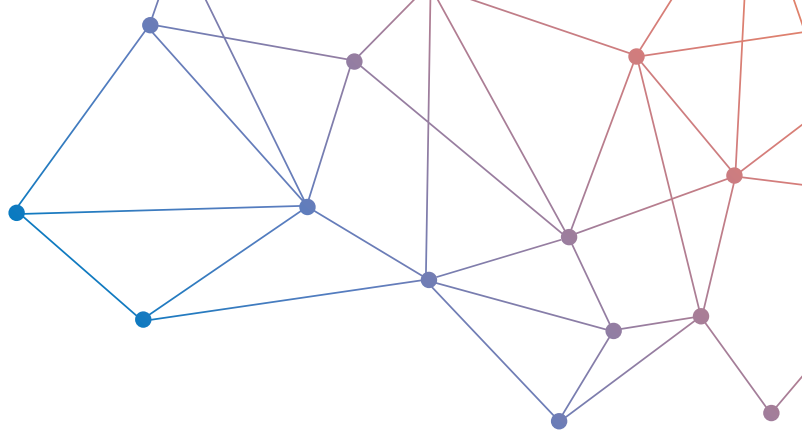


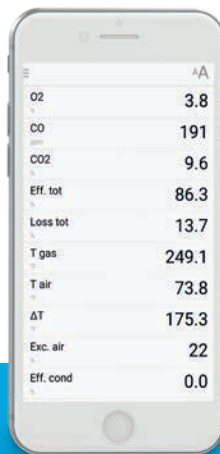
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# COMBUSTION GAS ANALYZERS

**Industrial, Residential & Commercial Applications**



	+A
O2	3.8
CO	191
CO2	9.6
Eff. tot	86.3
Loss tot	13.7
T gas	249.1
T air	73.8
ΔT	175.3
Exc. air	22
Eff. cond	0.0





# Combustion gas analyzers

Industrial, Residential & Commercial Applications

**Robust, ergonomic & compact, the Combustion Analyzers are easy-to-use. Their all-in-one functions: Combustion Gas Analysis, Emissions measurements, Draft, Pressure and Differential Temperature measurements and Ambient CO monitoring make them an ideal partner.**

The range includes three instruments allowing measurements of many gases including:  $O_2$ ,  $CO$ ,  $CO_2$ ,  $NO$ ,  $NO_2$ ,  $SO_2$  and  $CxHy$ . Mobile applications are available for both IOS & Android, and all devices have Bluetooth® function.



# Product Overview

## Combustion gas analyzers



Si-CA 220



Si-CA 120



Si-CA 320

Monitoring  
Configuration  
Emissions Measurement  
on Boilers, Engines & other  
Applications



Wireless printer



PC and mobile  
Applications



### Optional 5 years Warranty including:

- Mechanical parts replacement\*
- Electronical parts replacement\*
- Sensors replacement\*



### Optional 5 years Maintenance including:

- Mechanical parts replacement\*
- Electronical parts replacement\*
- Sensors replacement\*
- Automatic calibration date reminder
- Reminder provided for annual maintenance
- Labour costs for maintenance
- Calibration certificate
- Ex-factory shipping ports

\*Not included: shipping cost to manufacturer, probe and hose, missing parts, consumables (filters & water trap), damages on the transport case caused by an improper manipulation and/or use. One replacement maximum for each type of cell during the product lifetime.

# Technical Information

## Combustion gas analyzers



Si-CA 120

Si-CA 220

Si-CA 320

Parameter	Sensor	Range	Resolution	Accuracy	Si-CA 120	Si-CA 220	Si-CA 320
O <sub>2</sub>	Electrochemical	0 - 25 %	0.1 %	±0.2 % vol	✓	✓	✓
CO-H <sub>2</sub> compensated w/ built-in NOx filter	Electrochemical	0 - 8000 ppm	1 ppm	±10 ppm <200 ppm ±5 % rdg up to 2000 ppm ±10 % rdg for >2000 ppm	✓	✓	✓
CO diluted	Electrochemical	0.8 - 10.00 %	0.01 %	±20 % rdg	-	✓	✓
CO <sub>2</sub>	Calculated	0 - 99.9 %	0.1 %		✓	✓	✓
NO	Electrochemical	0 - 5000 ppm	1 ppm	±5 ppm <100 ppm ±5% rdg for >100 ppm	-	Optional	✓
NO <sub>2</sub>	Electrochemical	0 - 1000 ppm	1 ppm	±5 ppm <100 ppm ±5% rdg for >100 ppm	-	Optional	Optional
Low NO	Electrochemical	0 - 500 ppm	0.1 ppm	±2 ppm <40 ppm ±5 % rdg for >40 ppm	-	Optional	Optional
Low NO <sub>2</sub>	Electrochemical	0 - 500 ppm	0.1 ppm	±2 ppm <40 ppm ±5 % rdg for >40 ppm	-	Optional	Optional
NOx	Calculated	0 - 5000 ppm	1 ppm		-	Optional	Optional
SO <sub>2</sub>	Electrochemical	0 - 5000 ppm	1 ppm	±5 ppm <100 ppm ±5% rdg for >100 ppm	-	Optional	Optional
Low SO <sub>2</sub>	Electrochemical	0 - 500.0 ppm	0.1 ppm	±2 ppm <40 ppm ±5% rdg for >40.1 ppm	-	Optional	Optional
CxHy (HC)	Pellistor	0 - 5 %	0.01 %	±0.25 vol	-	Optional	Optional
H <sub>2</sub> S	Electrochemical	0 - 500.0 ppm	0.1 ppm	±5 ppm <125.0 ppm ±4 % rdg for <500.0 ppm	-	-	Optional
Tair	Tc K	-20 to 1250 °C	0.1 °C	±0.5°C from 0 to 100°C ±0.5% rdg from 101 to 1250°C	✓	✓	✓
Tgas	Tc K	-20 to 1250 °C	0.1 °C	±0.5°C from 0 to 100°C ±0.5% rdg from 101 to 1250°C	✓	✓	✓
Differential temperature	Calculated	0 to 1250 °C	0.1 °C	-	✓	✓	-
Pressure/Draft	Semiconductor	-4 to 80 inH <sub>2</sub> O -10 to 200 hPa	0.001 inH <sub>2</sub> O 0.01 hPa	±1 % rdg from -10 to -2.01 hPa ±0.02 hPa from -2.00 to 2.00 hPa ±1 % rdg from 2.01 to 200 hPa	✓	✓	✓
Excess air	Calculated	0 - 850 %	1 %	-	✓	✓	✓
Efficiency	Calculated	0 - 100 %	0.1 %	-	✓	✓	✓
Efficiency (condensation)	Calculated	0 - 120 %	0.1 %	-	✓	✓	✓
Wireless Bluetooth® Printer					Optional	Optional	Optional
FIELD-REPLACEABLE Pre-Calibrated Sensors					✓	✓	✓
QR code app	 				✓	✓	✓
Real time display of data on the smartphone					✓	✓	✓
PC Software & USB Cable & Bluetooth®					✓	✓	✓
Automatic Data Logging					✓	✓	✓
Internal Memory (# of Tests)					2,000	2,000	2,000
Rechargeable Battery w/ AC Charger					✓	✓	✓
Display Screen					Multicolor	Multicolor	Multicolor

## Si-CA 120 Ordering Information

Item #	Description
Si-CA 120-NP	Si-CA 120-NP Kit with Standard Probe
Si-CA 120-NP-G5	5 years Warranty for Si-CA 120-NP analyzer
Si-CA 120-NP-T5	5 years Maintenance for Si-CA 120-NP analyzer
Si-CA 120-NP-P	Si-CA 120-NP with Differential Pressure Manometer Kit (2 Hoses)
Si-CA 120-NP-P-G5	5 years Warranty for Si-CA 120-NP-P analyzer
Si-CA 120-NP-P-T5	5 years Maintenance for Si-CA 120-NP-P analyzer

## Si-CA 220 Ordering Information

Item #	Description
Si-CA 220-NP-2	Si-CA 220-NP Kit with O <sub>2</sub> & CO Gas Sensors & CO Dilution Auto-Range to 10%, <b>Upgradable</b> to 3 & 4 Gas sensors
Si-CA 220-NP-2-G5	5 years Warranty for Si-CA 220-NP-2 analyzer
Si-CA 220-NP-2-T5	5 years Maintenance for Si-CA 220-NP-2 analyzer
Si-CA 220-NP-3	Si-CA 220-NP Kit with O <sub>2</sub> , CO, <b>NO/NOx</b> Gas Sensors & CO Dilution Auto-Range to 10%, <b>Upgradable</b> to 4th Gas Sensor
Si-CA 220-NP-3-G5	5 years Warranty for Si-CA 220-NP-3 analyzer
Si-CA 220-NP-3-T5	5 years Maintenance for Si-CA 220-NP-3 analyzer
Si-CA 220-NP-N	Si-CA 220-NP Kit with O <sub>2</sub> , CO, NO/NOx, <b>NO<sub>2</sub></b> Gas Sensors & CO Dilution Auto-Range to 10%
Si-CA 220-NP-N-G5	5 years Warranty for Si-CA 220-NP-N analyzer
Si-CA 220-NP-N-T5	5 years Maintenance for Si-CA 220-NP-N analyzer
Si-CA 220-NP-S	Si-CA 220-NP Kit with O <sub>2</sub> , CO, NO/NOx, <b>SO<sub>2</sub></b> Gas Sensors & CO Dilution Auto-Range to 10%
Si-CA 220-NP-S-G5	5 years Warranty for Si-CA 220-NP-S analyzer
Si-CA 220-NP-S-T5	5 years Maintenance for Si-CA 220-NP-S analyzer

## Si-CA 320 Ordering Information

Item #	Description
Si-CA 320-NP-5DS	Si-CA 320-NP Kit with O <sub>2</sub> , CO, NO, <b>NO<sub>2</sub>, SO<sub>2</sub></b> Gas Sensors & CO Dilution Auto-Range to 10%, <b>Upgradable</b> to 6th Gas Sensor*
Si-CA 320-NP-5DS-G5	5 years Warranty for Si-CA 320-NP-5DS analyzer
Si-CA 320-NP-5DS-T5	5 years Maintenance for Si-CA 320-NP-5DS analyzer
Si-CA 320-NP-5DC	Si-CA 320-NP Kit with O <sub>2</sub> , CO, NO, <b>NO<sub>2</sub>, CxHy(HC)</b> Gas Sensors & CO Dilution Auto-Range to 10%, <b>Upgradable</b> to 6th Gas Sensor*
Si-CA 320-NP-5DC-G5	5 years Warranty for Si-CA 320-NP-5DC analyzer
Si-CA 320-NP-5DC-T5	5 years Maintenance for Si-CA 320-NP-5DC analyzer
Si-CA 320-NP-5SC	Si-CA 320-NP Kit with O <sub>2</sub> , CO, NO, <b>SO<sub>2</sub>, CxHy(HC)</b> Gas Sensors & CO Dilution Auto-Range to 10%, <b>Upgradable</b> to 6th Gas Sensor*
Si-CA 320-NP-5SC-G5	5 years Warranty for Si-CA 320-NP-5SC analyzer
Si-CA 320-NP-5SC-T5	5 years Maintenance for Si-CA 320-NP-5SC analyzer
Si-CA 320-NP-5SH	Si-CA 320-NP with O <sub>2</sub> , CO, NO, <b>SO<sub>2</sub>, H<sub>2</sub>S</b> Gas Sensors & CO Dilution Auto-Range to 10%, <b>Upgradable</b> to 6th Gas Sensor*
Si-CA 320-NP-5SH-G5	5 years Warranty for Si-CA 320-NP-5SH analyzer
Si-CA 320-NP-5SH-T5	5 years Maintenance for Si-CA 320-NP-5SH analyzer
Si-CA 320-NP-6DSH	Si-CA 320-NP Kit with O <sub>2</sub> , CO, NO, <b>NO<sub>2</sub>, SO<sub>2</sub>, H<sub>2</sub>S</b> Gas Sensors & CO Dilution Auto-Range to 10%, <b>Upgradable</b> to 6th Gas Sensor*
Si-CA 320-NP-6DSH-G5	5 years Warranty for Si-CA 320-NP-6DSH analyzer
Si-CA 320-NP-6DSH-T5	5 years Maintenance for Si-CA 320-NP-6DSH analyzer
Si-CA 320-NP-6DSC	Si-CA 320-NP Kit with O <sub>2</sub> , CO, NO, <b>NO<sub>2</sub>, SO<sub>2</sub>, CxHy(HC)</b> Gas Sensors & CO Dilution Auto-Range to 10%, <b>Upgradable</b> to 6th Gas Sensor*
Si-CA 320-NP-6DSC-G5	5 years Warranty for Si-CA 320-NP-6DSC analyzer
Si-CA 320-NP-6DSC-T5	5 years Maintenance for Si-CA 320-NP-6DSC analyzer

\*All Configurations Available With Low NO, Low NO2 and/or Low SO2 Sensors

## Si-CA 120 Standard Probe

- 180 mm probe
- 400 °C max
- 1.5 m Dual hose

## Si-CA 220 & 320 Standard Probe

- 300 mm probe
- 800 °C max
- 3 m Dual Hose

## Options

### Si-CA 220 & 320 Long Probe & Hose

- 750 mm probe
- 800 °C max
- 3 m Dual Hose

### Si-CA 220 & 320 Long & High Temp Probe & Hose

- 1 m or 1.5 m Probe
- 1200 °C max
- 3 m Hose

### Hose Extensions

- 3 m Length Available

### Kits content

- Long Lasting Rechargeable Battery & AC Charger
- Gas Sampling Probe & Hose
- Water Trap with Filter Cartridge
- Magnetic Protective Housing
- PC Software & USB Cable
- Operating Manual & Quick Start Guide
- Calibration Certificate
- ABS Hard Carrying Case

### Standards

- RoHS & RAEE
- EN 50379-1
- EN 50379-2





NO, O<sub>2</sub>, CO, NO<sub>2</sub>,  
SO<sub>2</sub>, CxHy (HC)



Field Replaceable Sensors  
Sensors Diagnostic



Auto-Zero in the Flue



Automatic, True High-Efficiency Calculations for All Condensing Systems



Full Color Graphic Display



iOS and Android  
Mobile Applications



Optional wireless  
Bluetooth® printer



Long Lasting Rechargeable  
Battery & AC Charger



PC Software with Bluetooth®



## Applications

Windows PC and mobile  
(iOS & Android)



### Mobile

- Real-time data reading
- Data logging
- Reports creation
- QR code Scanning

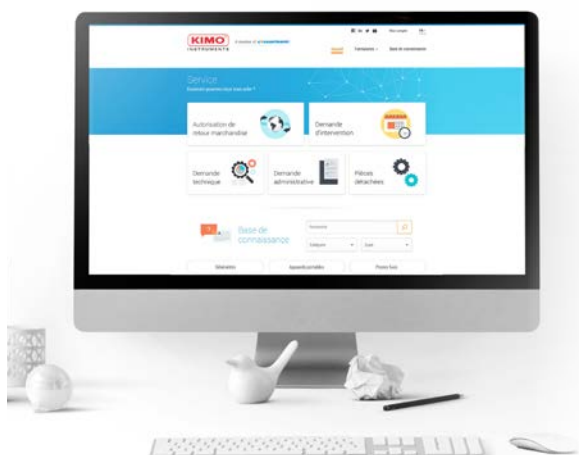
### PC

- Instrument Data Identification Display
- Analyzer Configuration
- Remote Display of Real-Time Analysis from the Portable Analyzer and Data Saving
- Display and/or Exportation or Deletion of Stored Analysis



# Services

## Calibration / Hotline / Maintenance



### Customer service portal

For any repair, calibration or device feedback requests, log in to our Customer Service Portal.



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real time

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Calibration and  
adjustments



After-sales  
services



Hotline



On-site services



Training

**Our laboratories, spanning over 1,500 m<sup>2</sup>, allow us to offer you all kinds of metrological services related to:**

- Temperature
- Humidity
- Air velocity
- Air flow
- Pressure
- Combustion
- Weighing
- Radiometry
- Tachometry
- Light measurement
- Electrical current



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KIMO can perform COFRAC calibrations on any type of thermometer (measuring chain, Pt100, thermocouple, etc.) within a range from -70 to +200°C in thermostatic chambers and in baths.



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### Accredited hygrometry laboratory as per ISO 17025 standard

KIMO can perform COFRAC calibrations on any type of hygrometer within a range from 10 to 95 %RH, for a dry temperature from +10 to +50°C.