



COMBUSTION GAS ANALYZERS

A new degree of efficiency





 **sauermann®**

 **KIMO®**
INSTRUMENTS

Sauermann Group was established in 1976 and headquartered in Brussels, Belgium. For over 45 years, Sauermann Group has designed, manufactured and sold products and services dedicated to the industrial and HVACR markets. The Group specifically focuses on the detection, measurement and control of indoor air quality (IAQ) as well as condensates removing.

In 2005, founded subsidiary - **Sauermann (Shanghai) General Equipment Manufacturing Co., Ltd.** in China, which operates **Sauermann** and **Kimo** brands business locally.

Our products mainly include condensate removal pumps, transmitters, portable instruments (pressure, temperature, humidity, air velocity, air flow, IAQ, Light...), combustion gas analyzers, data loggers, manometers and etc.

With professional technology and high-quality services, we have provided the Chinese market with an quantity of comprehensive solutions for clean rooms, indoor environments, air conditioning systems, production processes, construction services etc., has become one of the preferred partners in many important areas.



Si-CA Range



Color **Touch-screen**

Small & Lightweight
Easy to carry

Predictive maintenance & calibration reminders

automatic logging & report creation (PDF, CSV, XML)

PC software with USB & wireless connectivity

Graphical data display

Calculate combustion efficiency

Predictive sensor life



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Combustion gas analyzers

A new degree of efficiency



Our combustion gas analyzers are ideal for maintaining combustion equipment, covering the full range of operations in residential, commercial and industrial applications.

Sauermann offers a range of compact and intuitive analyzers to enhance your performance.

Sauermann's combustion gas analyzers feature the latest digital and metrology technologies, making measurements more reliable and cutting the amount of time heating engineers need to spend on-site. A user experience like no other!

Applications

- Boilers
- Burners
- Water heaters
- Gas and diesel engines
- Furnaces
- Industrial kilns
- Industrial heating systems
- Incinerators



Residential



Commercial



Industrial

Features

Add a digital edge to your combustion analysis



**Auto pump cut-off
for high CO levels
(adjustable)**



**Predictive maintenance with
estimated sensor life
& calibration reminders**



**Draft & differential pressure
measurements**



**Mobile phone app for real-time
remote display & control**



**Calculations for
Combustion Efficiency,
Excess Air, & CO₂%**



**Data management with automatic
logging & report creation**



Si-CA 030



Si-CA 130



Si-CA 230

LCD display size	2.8 inches	4.3 inches	4.3 inches
Display resolution	320 x 240 pixels	480 x 272 pixels	480 x 272 pixels
Touch-screen display	No (5 buttons)	Yes (+ on/off button)	Yes (+ on/off button)
Dimensions (H x W x D)	9,9 x 19,4 x 4,9 cm 7.5 x 3.5 x 1.6"	9,9 x 19,4 x 4,9 cm 7.5 x 3.5 x 1.6"	11,2 x 28 x 5,5 cm 11 x 4.3 x 2"
Weight	350 g - 12 oz	350 g - 12 oz	825 g - 30 oz
No. of cells	2 (O ₂ , CO)	Up to 3 (O ₂ , CO, Low NO)	Up to 6 (O ₂ , CO, NO, Low NO, NO ₂ , Low NO ₂ , SO ₂ , Low SO ₂ , CxHy, H ₂ S)
Max. CO measurement	8,000 ppm	8,000 ppm	50,000 ppm (with dilution)
CO dilution	-	-	✓
Field replaceable pre-calibrated sensors	-	✓	✓
Flue gas velocity with Pitot tube	-	✓	✓
Measurement storage	Smartphone	Internal: 2,000 data points + Smartphone and PC	Internal: 2,000 data points + Smartphone and PC
PC software (wireless & USB)	-	✓	✓
Smartphone app (wireless)	✓	✓	✓
Combustion Applications	Residential, Commercial	Residential, Commercial	Commercial, Industrial



To see our extensive range of other measurement instruments for heating applications, go to www.sauermanngroup.com

Selection Guide

Technical parameter

				
		Si-CA 030	Si-CA 130	Si-CA 230
Parameter	Mesuring range			
# of Gas Sensors		2	3	3 - 6
O ₂	0 ~ 25%	✓	✓	✓
CO	0 ~ 8,000 ppm	✓	✓	-
CO (H ₂ comp.)	0 ~ 10,000 ppm	-	-	✓
CO ₂ (calculated)	0 ~ 99.9%	✓	✓	✓
NO	0 ~ 5,000 ppm	-	-	✓
Low NO	0 ~ 300 ppm	-	✓	✓
NO ₂	0 ~ 1,000 ppm	-	-	✓
Low NO ₂	0 ~ 100 ppm	-	-	✓
NOx (calculated)	0 ~ 7500 ppm	-	-	✓
Low NOx (calculated)	0 ~ 450 ppm	-	✓	✓
SO ₂	0 ~ 5,000 ppm	-	-	✓
Low SO ₂	0 ~ 100 ppm	-	-	✓
CxHy (HC)	0 ~ 5%	-	-	✓
H ₂ S	0 ~ 500 ppm	-	-	✓
Flue temperature	-20 ~ +1,250 °C	✓	✓	✓
Air temperature	-20 ~ +120 °C	✓	✓	✓
Differential temperature	0 ~ 1,250 °C	✓	✓	✓
Pressure / Draft	-200 ~ 200 mbar	✓	✓	✓
High accuracy draft	-500 ~ +500 Pa	-	✓	✓
Excess air	0 ~ 999%	✓	✓	✓
Efficiency	0 ~ 100% (Gross / HHV)	✓	✓	✓
Efficiency (condensation)	0 ~ 125% (Net / LHV)	✓	✓	✓
Stack Gas velocity	0 ~ 99 m/s / 0 ~ 19,500 fpm	-	✓	✓
Application		Residential, Commercial	Residential, Commercial	Commercial, Industrial

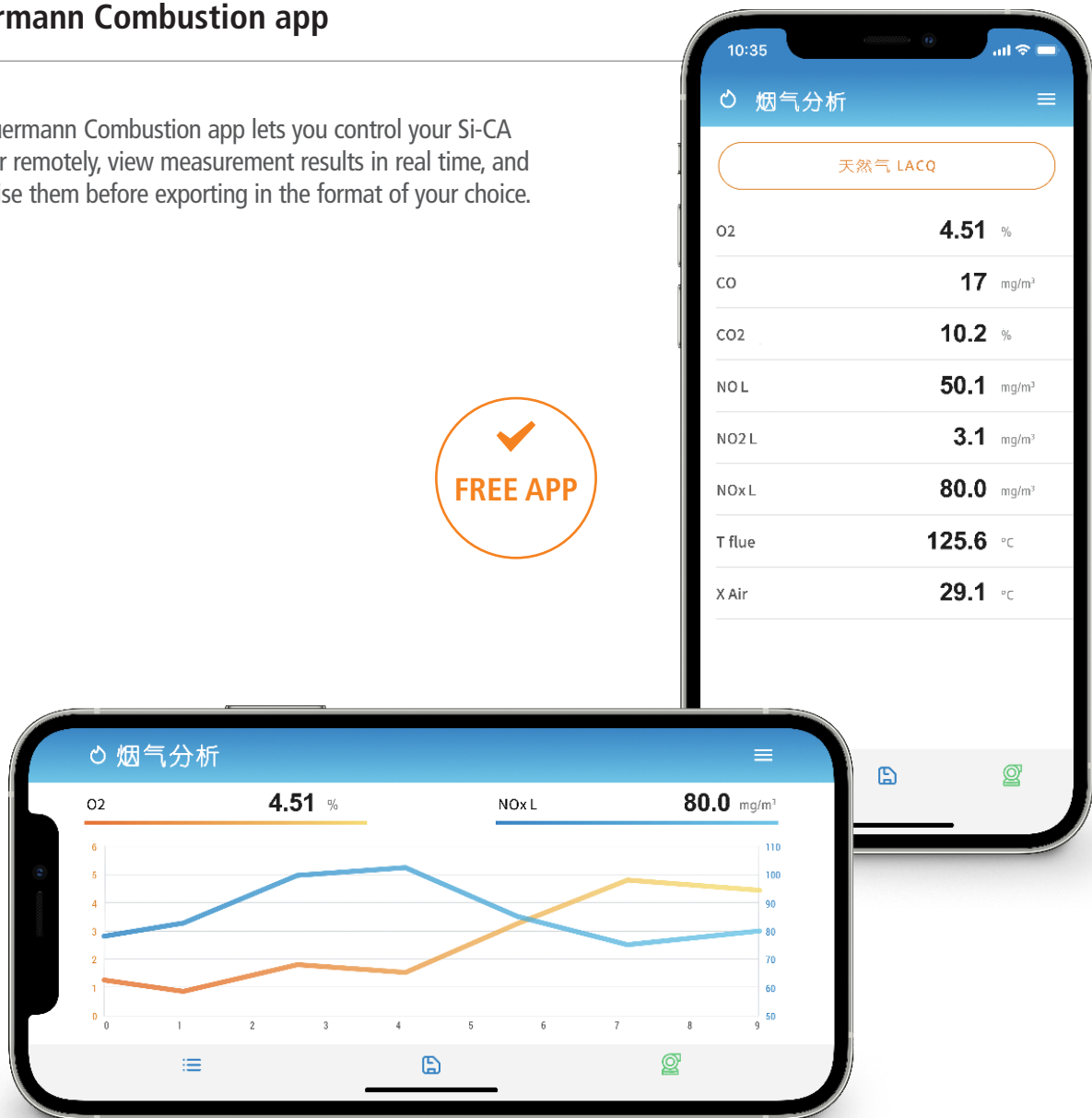
Features

Wireless Printer	Optional	Optional	Optional
Field-Replaceable Pre-Calibrated Sensors	-	✓	✓
Real time display of data on the smartphone  	✓	✓	✓
PC Software	-	✓	✓
Automatic Data Logging	✓	✓	✓
Rechargeable Battery w/AC Charger	✓	✓	✓

Mobile app

Sauermann Combustion app

The Sauermann Combustion app lets you control your Si-CA analyzer remotely, view measurement results in real time, and customise them before exporting in the format of your choice.



- Free apps for iOS & Android mobile devices
- PC software with USB & wireless connectivity
- Fast, easy wireless connection
- Remote live view of combustion analysis data as list or graph
- Remote control to change settings
- Data saving, including automatic logging
- Report creation in PDF, CSV (for Excel) and XML formats
- Databases for customers, operators, & equipment

Download Sauermann Combustion app



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App Store is a service mark of Apple Inc.

SI-CA 030

All the essentials for combustion gas analysis



The Si-CA 030 offers everything heating engineers need to inspect and maintain residential and commercial boilers, with wireless connection to our smartphone app and automatic generation of servicing reports and certificates.



Two gas sensors:
O₂ and CO



Data management with automatic
logging & report creation through
app/PC software



Auto pump cut-off
for high CO levels



Lightweight, only 350 g (12 oz)



Color screen


LIGHTWEIGHT
350 g



Si-CA 030 Features :

- Quick and easy pump On/Off control
- Predictive maintenance with estimated sensor life & calibration reminders
- Draft & differential pressure measurements
- Calculated CO₂% value

Operation interface

10:38 - 08/08/2021	
烟气分析	
天然气 LACQ	
O ₂	3.61 %
CO	12 mg/m ³
CO ₂	9.9 %
T flue	125.9 °C
X Air	26.1 °C

09:58 - 07/08/2021	
菜单	
气泵	☒
烟气分析	
其他测量功能	
设置	
打印	
分析仪信息	

10:28 - 07/08/2021	
O ₂	
类型	电化学式
量程	0.00 - 25.00 %
最近一次校准信息	07/06/2021
安装	07/06/2021
输出	-103.79 uA
传感器使用期限预估	

11:28 - 07/08/2021	
设置	
常规设置	>
分析设置	>
测量单位	>
存储功能	>
输出	>
打印机	>

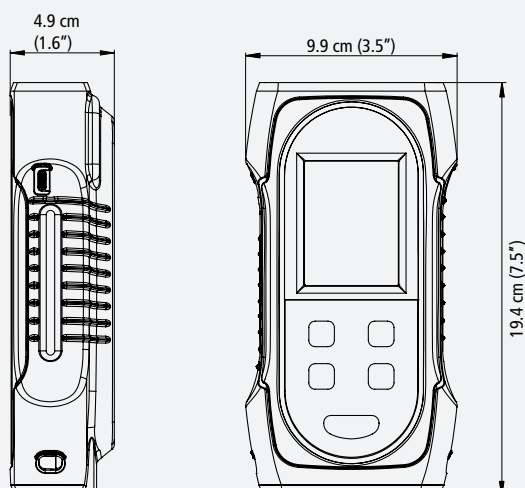


Note: Smartphone not included

Si-CA 030 Kit content :

- Si-CA 030 analyzer
- O₂ & CO gas sensors
- Protective rubber holster
- 180 / 300 mm flue gas probe with dual hose
- Water trap with filter
- AC power supply / charger
- USB cable
- Mobile app
- Internal wireless communication module
- Carrying bag or box packaging
- Quick Start Guide
- Factory Calibration Certificate

Dimensions



- Combustion efficiency & excess air calculations
- Protective rubber holster
- Two-years guarantee
- Emissions values adjusted for reference O₂

Si-CA 030 Parameter Specifications

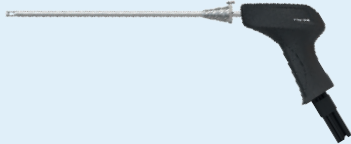
Parameters	Sensor	Mesuring range	Resolution	Accuracy ⁽¹⁾	T ₉₀ response time
O ₂	Electrochemical	0 ~ 25%	0.01%	± 0.2% vol	< 30 s
CO	Electrochemical	0 ~ 8,000 ppm	1 ppm	± 8 ppm (0 ~ 159 ppm) ± 5% rdg (160 ~ 2,000) ppm ± 10% rdg (2,001 ~ 8,000 ppm)	< 40 s
CO ₂	Calculated	0 ~ 99.9%	0.1%	-	-
Flue temperature	TcK	-20 ~ + 1,250 °C	0.1 °C	± 2 °C or ± 0.5% rdg ⁽²⁾	-
Air temperature	NTC or TcK	-20 ~ + 120 °C	0.1 °C	± 2 °C	-
Differential temperature	Calculated	0 ~ 1,250 °C	0.1 °C	-	-
Pressure / Draft	Semiconductor	-200 ~ + 200 mbar	0.01 mbar	± 1% rdg ± 0.03 mbar	-
Excess air	Calculated	0 ~ 999%	1%	-	-
Efficiency	Calculated	0 ~ 100% (Gross / HHV ⁽³⁾)	0.1%	-	-
Efficiency (condensation)	Calculated	0 ~ 125% (Net / LHV ⁽⁴⁾)	0.1%	-	-

⁽¹⁾ All accuracies indicated in this document were stated in laboratory conditions at 20 °C and 1013 mbar and can be guaranteed for measurement carried out in the same conditions. ⁽²⁾ Accuracy given for the analyzer only. ⁽³⁾ For Higher Heating Value / ⁽⁴⁾ For Lower Heating Value

Si-CA 030 General Features

Dimensions	19.4 x 9.9 x 4.9 cm
Weight	350 g
Display	Color display screen; Size: 320 x 240 pixels
Keypad	5 keys
Material	ABS-PC
Protection	IP42
Connection	-Wireless: class 2 range, range frequency from 2402 MHz to 2480 MHz, with a transmit power of 1 dBm. Range up to 15m(50ft), depending on smartphone radio strength. Minimum required versions: Android 8.0, iOS 12.4, BLE 4.0 Low Energy -USB
Power supply	Rechargeable battery, USB power supply Li-Ion 5100 mA/h 3.6 V battery / Power supply voltage of the mains unit: 100-240 Vac, 50-60 Hz Mains unit: 5 Vdc/2A
Battery	Battery life > 8 h; Charging time: Fully charge: < 6.5h; 50% <2.5h
Environmental conditions of use	Temperature : from -5 to 45 °C Hygrometry: in non-condensing conditions (<85 %RH) Maximum altitude: 2000 m
Storage temperature	-20 ~ 50 °C
Languages	English, Chinese, French, German, Spanish, Italian, Portuguese
European Union Directives	2014/53/EU (RED); 2015/863 EU (RoHS 3)
Regulation	EN 50379-1 and EN 50379-2; UNI 10389; UL & cUL Certification; BS 7967:2015; BS EN 50543:2011; UNE 60670-10; ES.02173.ES; TÜV SÜD Certification

Accessories for option

Reference	Description	illustration
27532 (180 mm) 27533 (300 mm) 27534 (750 mm)	180 mm probe, 2m dual hose and water trap 300 mm probe, 2m dual hose and water trap 750 mm probe, 2m dual hose and water trap	
27546	Remote wireless printer	
27537	3 m dual hose extension	
27538	Differential pressure hose kit	
28186	SCU S+M (Sample Conditioning Unit). Factory mounting.	

Si-CA 030 Ordering information

Reference	Item #	Description
27495	Si-CA 030 Kit 2AC	includes 2 gas sensors (O ₂ and CO), 180 mm, probe rated to +800 °C with 2 m dual hose, protective rubber holster, water trapl, AC power supply / charger, USB cable, Quick Start Guide, Factory calibration certificate, cardboard box packaging.
27498	Si-CA 030 Kit 2BS	includes 2 gas sensors (O ₂ and CO), 300 mm, probe rated to +800 °C with 3 m dual hose, protective rubber holster, water trapl, AC power supply / charger, USB cable, Quick Start Guide, Factory calibration certificate, vinyl carrying case.



SI-CA 130



Comprehensive, versatile analyzer with touch-screen display



The Si-CA 130 features a touch-screen display and comes with PC-based management software (in addition to the smartphone app) for more in-depth combustion gas analysis. The three field-replaceable cells and sensors offer expanded measurement capability.



Up to three gas sensors:
O₂, CO, and Low NO/Low NO_x



Field-Replaceable Pre-Calibrated
Sensors



Auto pump cut-off for high CO levels
(user-adjustable)



Data management with automatic
logging & report creation through app
/PC software



Lightweight, only 350 g (12 oz)

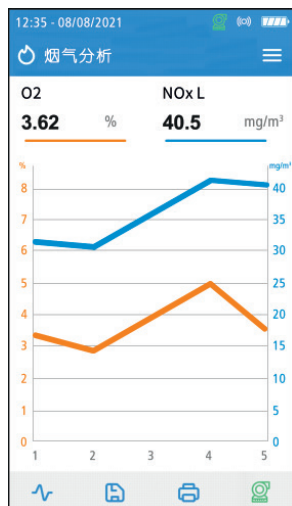
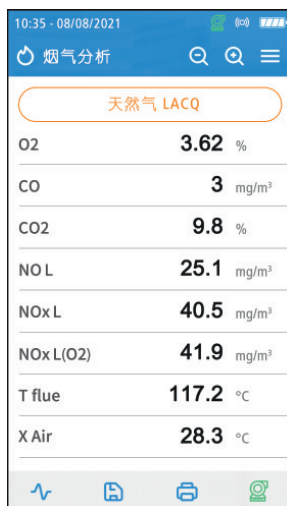


Large color touch screen

Si-CA 130 Features :

- Auto pump cut-off for high CO levels (user-adjustable)
- One Touch Pump On/Off with Purge
- PC software with wireless and USB connectivity
- Graphical data display
- Customizable gas analysis screen
- Predictive maintenance with estimated sensor life & calibration reminders

Operation interface



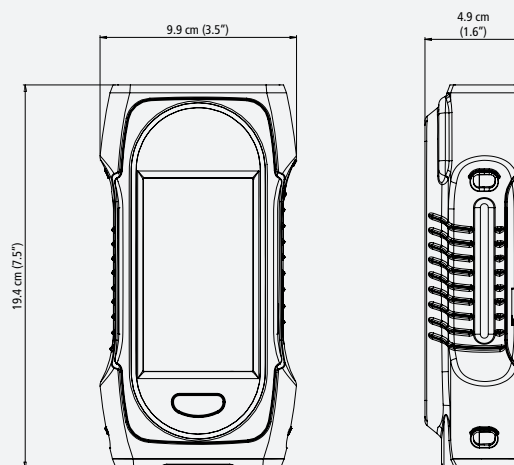
注意：产品不含智能手机

Si-CA 130 Kit content :

- Si-CA 130 analyzer
- two or three gas sensors
- Protective rubber holster
- 300 mm flue gas probe with 3 m dual hose
- Water trap with filter
- AC power supply / charger
- USB cable
- Mobile app & PC software
- Internal wireless communication module
- Carrying bag
- Quick Start Guide
- Factory Calibration Certificate

Dimensions

- Draft & differential pressure measurements
- Calculated CO₂% value
- CO Monitoring in Ambient Air
- Combustion efficiency & excess air calculations
- Protective rubber holster
- Four-years guarantee
- Emissions values adjusted for reference O₂



Si-CA 130 Parameter Specifications

Parameters	Sensors	Measuring range	Resolution	Accuracy ⁽¹⁾	T ₉₀ Response time
O ₂	Electrochemical	0 ~ 25%	0.01%	± 0.2% vol	< 30 s
CO	Electrochemical	0 ~ 8,000 ppm	1 ppm	± 8 ppm (0 ~ 159 ppm) ± 5% rdg (160 ~ 2,000 ppm) ± 10% rdg (2,001 ~ 8,000 ppm)	< 40 s
CO ₂	Calculated	0 ~ 99.9%	0.1%	-	-
Low NO	Electrochemical	0 ~ 300 ppm	0.1 ppm	± 1.5 ppm (0.0 ~ 29.9 ppm) ± 5% rdg (30.0 ~ 300.0 ppm)	< 40 s
Low NOx	Calculated	0 ~ 450 ppm	0.1 ppm	-	-
Flue temperature	TcK	-20 ~ +1,250 °C	0.1 °C	± 2 °C or ± 0.5% rdg ⁽²⁾	-
Air temperature	NTC or TcK	-20 ~ +120 °C	0.1 °C	± 2 °C	-
Differential temperature	Calculated	0 ~ 1,250 °C	0.1 °C	-	-
Pressure / Draft	Semiconductor	-200 ~ +200 mbar	0.01 mbar	± 1% rdg ± 0.03 mbar	-
Excess air	Calculated	0 ~ 999%	1%	-	-
Efficiency	Calculated	0 ~ 100% (Gross / HHV ⁽³⁾)	0.1%	-	-
Efficiency (condensation)	Calculated	0 ~ 125% (Net / LHV ⁽⁴⁾)	0.1%	-	-
Stack gas velocity	Calculated	0 ~ 99 m/s	0.1 m/s	-	-

⁽¹⁾ All accuracies indicated in this document were stated in laboratory conditions at 20 °C and 1013 mbar and can be guaranteed for measurement carried out in the same conditions. ⁽²⁾ Accuracy given for the analyzer only. ⁽³⁾ For Higher Heating Value / ⁽⁴⁾ For Lower Heating Value

Si-CA 130 General Features

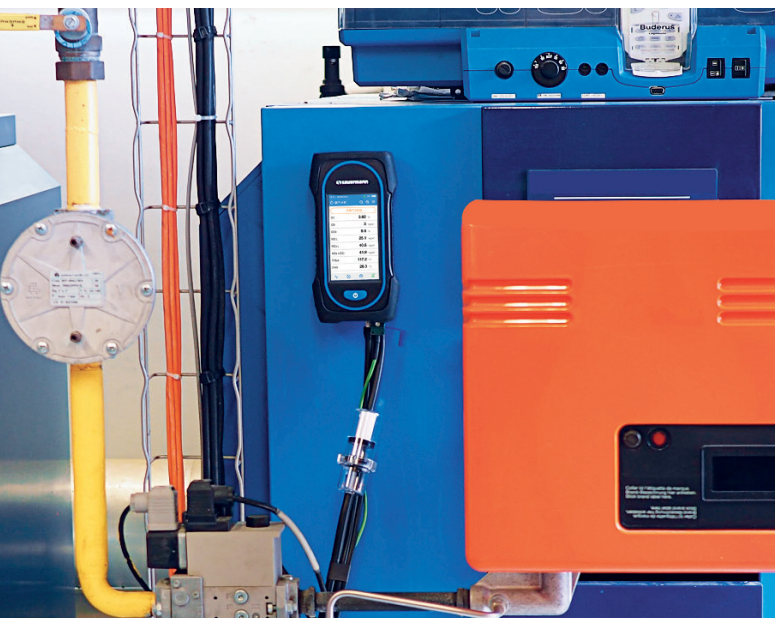
Dimensions	19.4 x 9.9 x 4.9 cm
Weight	350 g
Display	Color Touch Screen with Graphing; Size: 480 x 272 pixels
Keypad	1 On-Off key
Material	ABS-PC
Protection	IP42
Connection	- Wireless: class 2 range, range frequency from 2402 MHz to 2480 MHz with a transmit power of 1 dBm. Range up to 15 m (50 ft), depending on smartphone radio strength. Minimum required versions: Android 8.0, iOS 12.4, BLE 4.0 Low Energy - USB
Power supply	Rechargeable battery, USB power supply Li-Ion 5100 mA/h 3.6 V battery / Power supply voltage of the mains unit: 100-240 Vac, 50-60 Hz Mains unit: 5 Vdc/2A
Battery	Battery life > 8 h; Charging time: Fully charge: < 6.5 h; 50%: < 2.5 h
Environmental conditions of use	Temperature: from -5 to 45 °C (23 to 113 °F), Hygrometry: in non-condensing conditions (< 85% RH) Maximum altitude: 2000 m (6561')
Storage temperature	-20 - 50 °C
Languages	English, Chinese, French, German, Spanish, Italian, Portuguese
European Union Directives	2014/53/EU (RED); 2015/863 EU (RoHS 3)
Regulation	EN 50379-1 and EN 50379-2; UNI 7129; UNI 11137; UNI 10389; UNI 10845; UL & cUL Certification; BS 7967:2015; BS EN 50543:2011; UNE 60670-10; ES.02173.ES ; TÜV SÜD Certification

Accessories for option

Reference	Description	illustration
27532 (180 mm) 27533 (300 mm) 27534 (750 mm) 27535 (1 m) 27536 (1.5 m)	180 mm probe with 2 m dual hose, and water trap 300 mm probe with 3 m dual hose, and water trap 750 mm probe with 3 m dual hose, and water trap 1 m probe with 3 m dual hose, and water trap 1.5 m probe with 3 m dual hose, and water trap	
27546	Remote wireless printer	
27537	3 m dual hose extension	
27538	Differential pressure hose kit	
28186	SCU S+M (Sample Conditioning Unit). Factory mounting.	

Si-CA 130 Ordering information

Reference	Item #	Description
27509	Si-CA 130 Kit 2BS	includes 2 gas sensors (O ₂ and CO), 300 mm, probe rated to +800 °C with 3 m dual hose, protective rubber holster, water trapl, AC power supply / charger, USB cable, Quick Start Guide, Factory calibration certificate, vinyl carrying case.
27517	Si-CA 130 Kit 3LowBS	includes 3 gas sensors (O ₂ , CO and Low NO/Low NOx), 300 mm, probe rated to +800 °C with 3 m dual hose, protective rubber holster, water trapl, AC power supply / charger, USB cable, Quick Start Guide, Factory calibration certificate, vinyl carrying case.



SI-CA 230

State-of-the-art, industrial emissions analyzer



With up to six gas sensors and expanded measurement capabilities, the Si-CA 230 is well suited for boilers, burners, engines, and other industrial combustion applications. And with support for more gases and a high CO tolerance threshold, its versatility makes it the ideal choice across commercial and industrial applications.



Up to Six Gas Sensors. Can include O_2 , CO-H₂, NO, Low NO, NO₂, Low NO₂, SO₂, Low SO₂, H₂S, and CxHy



CO Dilution auto-range with measurements to 50,000 ppm



High precision NO_x measurement



High precision SO₂ measurement



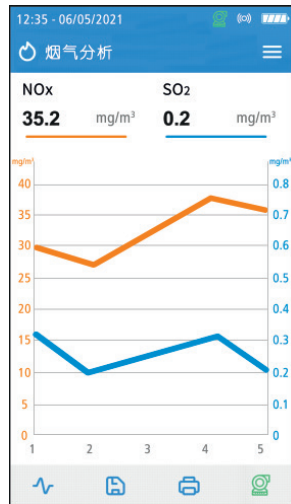
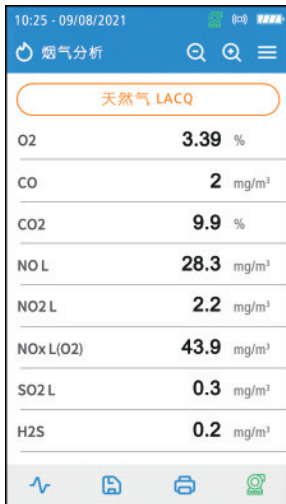
Field Replaceable Pre-Calibrated Sensors



Si-CA 230 Features :

- Ergonomic, light weight, & durable design
- Data management with automatic logging & report creation through app/PC software
- Predictive maintenance with estimated sensor life & calibration reminders
- One Touch Pump On/Off with Purge
- PC software with wireless and USB connectivity
- CO auto dilution

Operation interface

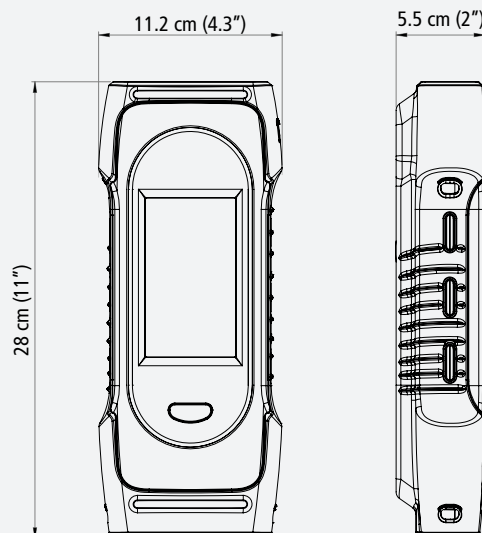


注意：产品不含智能手机

Si-CA 230 Kit content :

- Si-CA 230 analyzer
- O₂ & CO gas sensors (ac.to different kits)
- CO Dilution auto-range with measurements to 50,000 ppm
- Protective rubber holster
- 300 mm probe with 3 m dual hose
- Water trap with filter
- AC power supply / charger
- USB cable
- Mobile app & PC software
- Internal wireless communication module
- ABS plastic carrying case
- Quick Start Guide
- Factory Calibration Certificate

Dimensions



- Graphical data display
- Customizable gas analysis screen
- Stack gas velocity with Pitot tube
- Draft and differential pressure measurements
- Emissions values adjusted for reference O₂
- Protective rubber holster
- Four-years guarantee

Si-CA 230 Parameter Specifications

Parameters	Sensors	Measuring range	Resolution	Accuracy ⁽¹⁾	T ₉₀ Response time
O ₂	Electrochemical	0 ~ 25%	0.01%	± 0.2% vol	T ₉₀ < 30 s
CO	Electrochemical	0 ~ 8,000 ppm	1 ppm	± 8 ppm (0 ~ 159 ppm) ± 5% rdg (160 ~ 2,000 ppm) ± 10% rdg (2,001 - 8,000 ppm)	T ₉₀ < 40 s
CO (H ₂ comp.)	Electrochemical	0 ~ 10,000 ppm	1 ppm	± 8 ppm (0 ~ 159 ppm) ± 5% rdg (160 ~ 2,000 ppm) ± 10% rdg (2,001 - 10,000 ppm)	T ₉₀ < 40 s
CO (with dilution)	Electrochemical	100 ~ 50,000 ppm	1 ppm	± 10% rdg	T ₉₀ < 40 s
CO ₂	Calculated	0 ~ 99.9%	0.1%	-	-
NO	Electrochemical	0 ~ 5,000 ppm	1 ppm	± 5 ppm (0 - 99 ppm) ± 5% rdg (100 - 5,000 ppm)	T ₉₀ < 40 s
Low NO	Electrochemical	0 ~ 300 ppm	0.1 ppm	± 1.5 ppm (0.0 - 29.9 ppm) ± 5% rdg (30.0 - 300.0 ppm)	T ₉₀ < 40 s
NO ₂	Electrochemical	0 ~ 1,000 ppm	1 ppm	± 5 ppm (0 - 99 ppm) ± 5% rdg (100 - 1,000 ppm)	T ₆₀ < 60 s
Low NO ₂	Electrochemical	0 ~ 100 ppm	0.1 ppm	± 1.5 ppm (0.0 - 29.9 ppm) ± 5% rdg (30.0 - 100.0 ppm)	T ₆₀ < 60 s
NOx	Calculated	0 ~ 7,500 ppm	1 ppm	-	-
Low NOx	Calculated	0 ~ 450 ppm	0.1 ppm	-	-
SO ₂	Electrochemical	0 ~ 5,000 ppm	1 ppm	± 5 ppm (0 - 99 ppm) ± 5% rdg (100 - 5,000 ppm)	T ₆₀ < 30 s
Low SO ₂	Electrochemical	0 ~ 100 ppm	0.1 ppm	± 1.5 ppm (0.0 - 29.9 ppm) ± 5% rdg (30.0 - 100.0 ppm)	T ₆₀ < 30 s
CxHy	Pellistor	0 ~ 5%	0.01%	± 5% Full range	T ₉₀ < 40 s
H ₂ S	Electrochemical	0 ~ 500 ppm	0.1 ppm	± 5 ppm (0.0 - 99.9 ppm) ± 5% rdg (100.0 - 500.0 ppm)	T ₆₀ < 35 s
Flue temperature	TcK	-20 ~ +1,250 °C	0.1 °C	± 2 °C or ± 0.5% rdg ⁽²⁾	-
Air temperature	NTC or TcK	-20 ~ +120 °C	0.1 °C	± 2 °C	-
Differential temperature	Calculated	0 ~ 1,250 °C	0.1 °C	-	-
Pressure / Draft	Semiconductor	-200 ~ +200 mbar	0.01 mbar	± 1% rdg ± 0.03 mbar	-
Excess air	Calculated	0 ~ 999%	1%	-	-
Efficiency	Calculated	0 ~ 100% (Gross / HHV ⁽³⁾)	0.1%	-	-
Efficiency (condensation)	Calculated	0 ~ 125% (Net / LHV ⁽⁴⁾)	0.1%	-	-
Stack gas velocity	Calculated	0 ~ 99 m/s	0.1 m/s	-	-

⁽¹⁾ All accuracies indicated in this document were stated in laboratory conditions at 20 °C and 1013 mbar and can be guaranteed for measurement carried out in the same conditions. ⁽²⁾ Accuracy given for the analyzer only. ⁽³⁾ For Higher Heating Value / ⁽⁴⁾ For Lower Heating Value

Si-CA 230 General Features

Dimensions	28 x 11.2 x 5.5 cm
Weight	825 g
Display	Color Touch Screen with Graphing; Size: 480 x 272 pixels
Keypad	1 On-Off key
Material	ABS-PC
Protection	IP42
Connection	- Wireless: class 2 range, range frequency from 2402 MHz to 2480 MHz with a transmit power of 1 dBm. Range up to 15 m (50 ft), depending on smartphone radio strength. Minimum required versions: Android 8.0, iOS 12.4, BLE 4.0 Low Energy - USB
Power supply	Rechargeable battery, USB power supply Li-Ion 5100 mA/h 3.6 V battery / Power supply voltage of the mains unit: 100-240 Vac, 50-60 Hz Mains unit: 5 Vdc/2A
Battery	Battery life > 8 h; Charging time: Fully charge: < 6.5 h; 50%: < 2.5 h
Memory	Internal memory up to 2000 tests
Environmental conditions of use	Temperature: from -5 to 45 °C (23 to 113 °F), Hygrometry: in non-condensing conditions (< 85% RH) Maximum altitude: 2000 m (6561')
Storage temperature	-20 ~ 50 °C
Languages	English, Chinese, French, German, Spanish, Italian, Portuguese
European Union Directives	2014/53/EU (RED); 2015/863 EU (RoHS 3)
Regulation	EN 50379-1 and EN 50379-2; UNI 7129; UNI 11137; UNI 10389; UNI 10845; UL & cUL Certification; BS 7967:2015; BS EN 50543:2011; UNE 60670-10; ES.02173.ES ; TÜV SÜD Certification



Accessories for option

Reference	Description	illustration
27520 (NO) 27521 (Low NO)	NO/NO _x Sensor Low NO/Low NO _x Sensor	
27526 (NO ₂) 27527 (Low NO ₂)	NO ₂ Sensor Low NO ₂ Sensor	
27528 (SO ₂) 27529 (Low SO ₂)	SO ₂ Sensor Low SO ₂ Sensor	
27530	CxHy Sensor	
27531	H ₂ S Sensor	
27544	Draft probe	
27532 (180 mm) 27533 (300 mm) 27534 (750 mm) 27535 (1 m) 27536 (1.5 m)	180 mm probe with 2 m dual hose and water trap 300 mm probe with 3 m dual hose and water trap 750 mm probe with 3 m dual hose and water trap 1 m probe with 3 m dual hose and water trap 1.5 m probe with 3 m dual hose and water trap	
27546	Remote wireless printer	
27537	3 m dual hose extension	
27538	Differential pressure hose kit	
28186	SCU S+M (Sample Conditioning Unit). Factory mounting.	

Si-CA 230 Ordering information

All Si-CA 230 kits include :

300 mm probe rated to +800 °C with 3 m dual hose, protective rubber holster, water trapl, AC power supply / charger, USB cable, Quick Start Guide, Factory calibration certificate, ABS plastic carrying case.

Reference	Item #	Description
27597	Si-CA 230-3N	3 gas sensors : O ₂ , CO-H2 , NO
27598	Si-CA 230-3NL	3 gas sensors : O ₂ , CO-H2 , Low NO/Low NOx
27599	Si-CA 230-4ND	4 gas sensors : O ₂ , CO-H2 , NO/NOx, NO ₂
27600	Si-CA 230-4NS	4 gas sensors : O ₂ , CO-H2 , NO/NOx, SO ₂
27601	Si-CA 230-4NC	4 gas sensors : O ₂ , CO-H2 , NO/NOx, CxHy
27602	Si-CA 230-4NLDL	4 gas sensors : O ₂ , CO-H2 , Low NO/Low NOx, Low NO ₂
27603	Si-CA 230-4NLSL	4 gas sensors : O ₂ , CO-H2 , Low NO/Low NOx, Low SO ₂
27604	Si-CA 230-5NDS	5 gas sensors : O ₂ , CO-H2 , NO/NOx, NO ₂ , SO ₂
27605	Si-CA 230-5NDC	5 gas sensors : O ₂ , CO-H2 , NO/NOx, NO ₂ , CxHy
27606	Si-CA 230-5NSC	5 gas sensors : O ₂ , CO-H2 , NO/NOx, SO ₂ , CxHy
27607	Si-CA 230-5NSH	5 gas sensors : O ₂ , CO-H2 , NO/NOx, SO ₂ , H ₂ S
27608	Si-CA 230-5NLDLH	5 gas sensors : O ₂ , CO-H2 , Low NO/Low NOx, Low NO ₂ , Low SO ₂
27609	Si-CA 230-6NDSC	6 gas sensors : O ₂ , CO-H2 , NO/NOx, NO ₂ , SO ₂ , CxHy
27610	Si-CA 230-6NDSH	6 gas sensors : O ₂ , CO-H2 , NO/NOx, NO ₂ , SO ₂ , H ₂ S
27611	Si-CA 230-6NLDLH	6 gas sensors : O ₂ , CO-H2 , Low NO/Low NOx, Low NO ₂ , Low SO ₂ , H ₂ S

Combustion essentials

The extra tools you need



Gas leak detector

Si-CD3

The Si-CD3 gas leak detector is perfect for quickly and easily detecting even the slightest leaks of various combustible gases (methane, propane, isobutane, LPG and other hydrocarbons).



Adjustable alarm



LCD screen with adjustable backlight



30 cm flexible probe



Battery life: 20 hours (4 x AAA batteries)

Manometer

MP 115

This advanced portable manometer features two high-precision piezoresistive sensors, meaning it can be used to take standard and differential pressure measurements – all with a battery life of 180 hours.



Large LCD display



Hold function and min-max values



CO meter

CO 110

The portable CO 50 and CO 110 instruments make it easy to measure CO concentrations in the ambient air, as well as temperature. The CO 110 model comes with a wire probe, two adjustable alarms and a large, backlit LCD display.



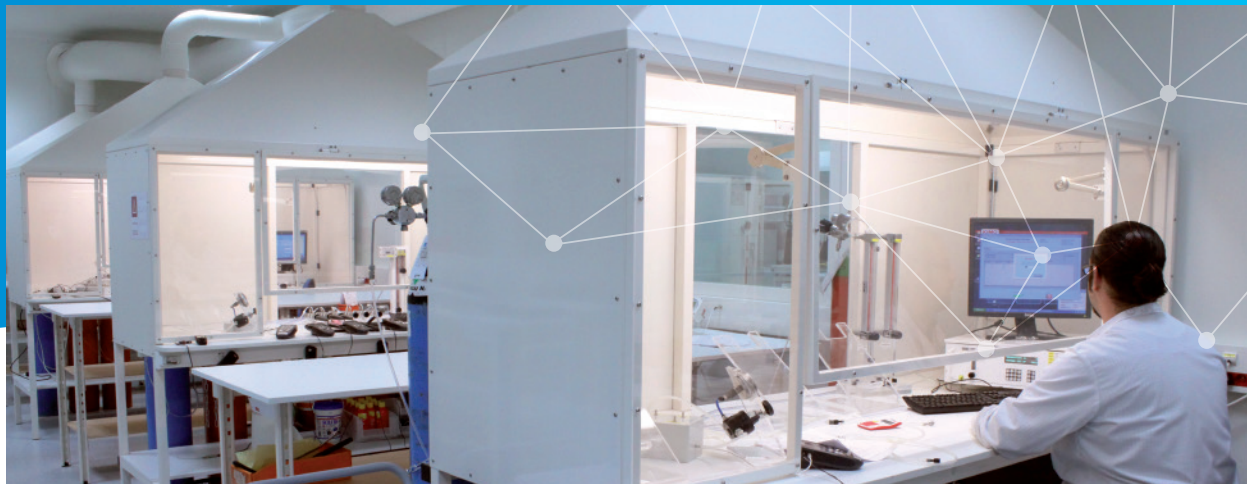
Calibration certificate



Hold function

Services

Expert metrology laboratories at your service



Our combustion gas analyzers are backed by experts at our metrology laboratories at every stage of their life cycle: from design through to maintenance.

Working from a dedicated combustion gas analysis room, our specialists offer a broad range of services: servicing and repairs on the same sites as our production lines, cell replacement and calibration, plus a hotline, on-premise services and training.



Hotline



After-sales
services



Calibration and
adjustments



Training



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Our experts, based in 800 sq m of laboratory space, provide adjustment and calibration services for all types of measurement instrument:

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- Temperature
- Humidity
- Air velocity
- Air flow
- Gas analysis
- Weighing
- Radiometry
- Tachometry
- Light measurement
- Electrical current
- Acoustics

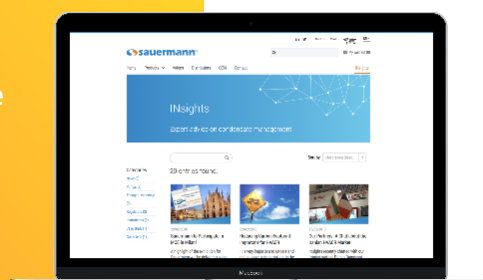


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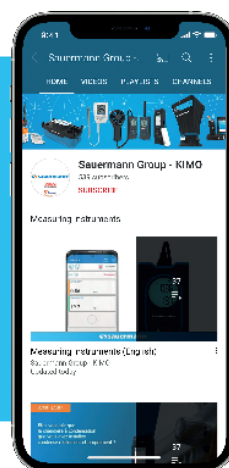
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