# **Sauermann**<sup>®</sup>



# DATA SHEET

# SI-CA 030 🕥

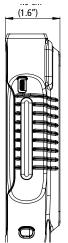
Máy phân tích đốt cháy trong dân dụng & thương mại Công nghệ phân tích quá trình đốt cháy mới nhất Thiết kế nhỏ gọn, nhẹ và bền

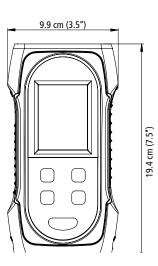




- Download on the App Store
- Predictive maintenance with estimated sensor life & calibration reminders
- Draft & differential pressure measurements
- Calculated CO<sub>2</sub>% value
- NOx capable with NO sensor

#### Dimensions





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- Quick and easy pump On/Off control
- Combustion efficiency & excess air calculations
- CO safety monitoring in ambient air
- Protective rubber holster
- Extended warranties available

#### Compact design



### Parameter specifications

Parameter	Sensor	Measuring range	Resolution	Accuracy <sup>(1)</sup>	T <sub>90</sub> response time
0,	Electrochemical	0 to 25%	0.01%	±0.2% vol	< 30 s
CO	Electrochemical	0 to 8000 ppm	1 ppm	±8 ppm < 160 ppm ±5% rdg up to 2000 ppm ±10% rdg > 2000 ppm	< 40 s
CO <sub>2</sub>	Calculated	0 to 99.9%	0.1%	-	-
NO (optional)	Electrochemical	0 to 5000 ppm	1 ppm	$\pm 5 \text{ ppm} < 100 \text{ ppm}$ $\pm 5\% \text{ rdg} > 100 \text{ ppm}$	< 40 s
NOx (optional)	Calculated	0 to 7500 ppm	1 ppm	-	-
Flue temperature	TcK	-4 to 2282 °F -20 to 1250 °C	0.1 °F 0.1 °C	$\pm 3.6$ °F or $\pm 0.5\%$ rdg <sup>(2)</sup> $\pm 2$ °C or $\pm 0.5\%$ rdg <sup>(2)</sup>	-
Air temperature	NTC or TcK	-4 to 248 °F -20 to 120 °C	0.1 °F 0.1 °C	±3.6 °F ±2 °C	-
Differential temperature	Calculated	0 to 2282 °F 0 to 1250 °C	0.1 °F 0.1 °C	-	-
Pressure/Draft	Semiconductor	-80 to 80 in $H_2O$ -200 to 200 mbar	$0.001 \text{ inH}_2\text{O}$ 0.01 mbar	$\pm 1\%$ rdg $\pm 0.012$ inH <sub>2</sub> 0 $\pm 1\%$ rdg $\pm 0.03$ mbar	-
Excess air	Calculated	0 to 999%	1%	-	-
Efficiency	Calculated	0 to 100% (Gross/HHV <sup>(3)</sup> )	0.1%	-	-
Efficiency (condensation)	Calculated	0 to 125% (Net/LHV <sup>(4)</sup> )	0.1%	-	-

<sup>(1)</sup>All accuracies indicated in this document were stated in laboratory conditions at 20 °C (68 °F) and 1013 mbar and can be guaranteed for measurement carried out in the same conditions. <sup>(2)</sup>Accuracy given for the analyzer only. <sup>(3)</sup>For Higher Heating Value / <sup>(4)</sup>For Lower Heating Value

#### **General features**

Dimensions	7.5 x 3.5 x 4.9" (19.4 x 9.9 x 4.9 cm)
Weight	12oz (350g)
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 50 ft (15 m), depending on smartphone radio strength. Minimum required versions: Android 5.0, iOS 12.4, BLE 4.0- 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), Hygrometry: in non-condensing conditions (< 85% RH) Maximum altitude: 6561' (2000 m)
Storage temperature	From -4 to 122 °F (-20 to 50 °C)
Languages	English, French, German, Spanish, Italian, Portuguese
European Union Directives	2014/53/EU (RED); 2015/863 EU (RoHS 3)
Regulations	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

#### Apps

- Free apps for iOS & Android mobile devices
- Fast, easy wireless connection
- Remote live view of combustion analysis data as list or graph
- Remote control to change settings



Download app

- Data saving, including automatic logging
- Report creation in PDF, CSV (for Excel) and XML formats
- Databases for customers, operators, & equipment



Graph view

	NATURAL GAS	
02	4.51	%
со	80	ppm
Eff. (ŋ)	91.4	%
CO2	12.5	%
T flue	170.3	°C
NO	78	ppm
NOx	82	ppm
Draft	1.094	mbar
r		<u>o</u>

Example of analyzer screens

Menu
Pump
Gas analysis
Other measurements
Settings
Print
Analyzer information

C Gas analysis			
NATURAL GAS			
02	4.23 %		
со 🗘	140 ppm		
Efficiency	82.9 %		
C02	500 ppm		
T-gas	<b>374</b> °⊧		

<ul><li>Alarms</li></ul>	
ALARM 1 <b>CO</b> 500 ppm - High treshold	ON
ALARM 2 <b>T-air</b> 30 °C - High treshold	ON
ALARM 3 <b>NO</b> 100 ppm - Low treshold	OFF

#### Si-CA 030 kit content

- Si-CA 030 analyzer
- O<sub>2</sub> & CO gas sensors (NO optional)
- Protective rubber holster
- Flue gas probe with dual hose
- Water trap with filter
- AC power supply / charger

- USB cable
- Mobile app
- Internal wireless communication module
- Carrying case or box packaging
- Quick Start Guide
- Calibration certificate



#### **Ordering Information**

Product	ltem #	Description
Si-CA 030 Kit 2AC	27495	Si-CA 030 Gas Analyzer Kit 2AC, two gas sensors (O2, CO), 7» (180mm) Probe, cardboard box packaging
Si-CA 030 Kit 2AS	27496	Si-CA 030 Gas Analyzer Kit 2AS, two gas sensors (O2, CO), 7» (180mm) Probe, vinyl carrying case
Si-CA 030 Kit 2AH	27497	Si-CA 030 Gas Analyzer Kit 2AH, two gas sensors (O2, CO), 7» (180mm) Probe, ABS hard plastic case
Si-CA 030 Kit 2BS	27498	Si-CA 030 Gas Analyzer Kit 2BS, includes two gas sensors (O2, CO), 12» (300mm) Probe, vinyl carrying case
SICA 030 KIT 3AC	27500	Si-CA 030 Gas Analyzer Kit 3AC, three gas sensors (O2, CO, NO), 7" (180mm) Probe, card- board box packaging
SICA 030 KIT 3AS	27501	Si-CA 030 Gas Analyzer Kit 3AS, three gas sensors (O2, CO, NO), 7" (180mm) Probe, vinyl carrying case
SICA 030 KIT 3AH	27502	Si-CA 030 Gas Analyzer Kit 3AH, includes three gas sensors (O2, CO, NO), 7" (180mm) Probe, ABS hard plastic carrying case
Si-CA 030 Kit 3BS	27503	Si-CA 030 Gas Analyzer Kit 3BS, includes three gas sensors (O2, CO, NO), 12» (300mm) Probe, vinyl carrying case

#### Maintenance

We carry out calibration, adjustment and maintenance of your devices to guarantee a consistent and accurate level of quality of your measurements. As part of Quality Assurance Standards, we recommend annual recalibration and maintenance check-up.

#### Warranty

Devices have 2-year guarantee against any manufacturing defect (return to our After-Sales Service required for appraisal).

## **Optional accessories**

Part number	Description	Image
27521	NO sensor for NOx	
27532 (180 mm) 27533 (300 mm) 27534 (750 mm)	180, 300 and 750 mm probes available	
27546	Remote wireless printer	
27537	3 m dual hose extension	
27538	Differential pressure hose kit	
24646	Smart air temperature probe with 2 m cable	
11994	Manual smoke pump kit	
27547	CO ambient probe	
27548	CO <sub>2</sub> ambient probe	
26811	SCU (Sample Conditioning Unit)	

