

DATA SHEET

Si-CA 130



Residential & commercial combustion analyzer
The latest in combustion analysis technology

Compact, Light and Durable Design



Note: Phone not included.



Up to three gas sensors O₂, CO, and NO or Low NO (for NO_x)



Large color touch screen



Lightweight, only 350 g (12 oz)



Field replaceable pre-calibrated sensors



CO sensor measurement up to 8000 ppm



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



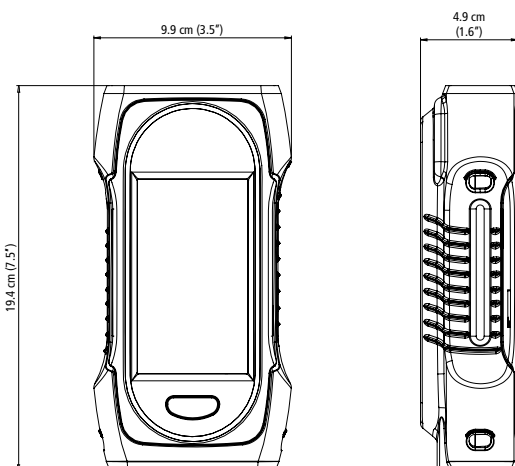
GET IT ON
Google Play

Download on the
App Store

- Predictive maintenance with estimated sensor life & calibration reminders
- Draft & differential pressure measurements
- Calculated CO₂% value
- Auto pump cut-off for high CO levels (user-adjustable)
- NO_x capable with NO sensor (optional)
- One Touch Pump On/Off with Purge
- PC software with wireless and USB connectivity
- Combustion efficiency & excess air calculations

- Graphical data display
- Customizable gas analysis screen
- Sample conditioning unit for low NO_x & high moisture applications
- CO & CO₂ Monitoring in Ambient Air
- Smart Air Temperature Probe
- Protective rubber holster
- Maintenance contracts and extended warranties available

Dimensions



Compact design



Parameter specifications

Parameter	Sensor	Measuring range	Resolution	Accuracy ⁽¹⁾	T ₉₀ response time
O ₂	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 ₂	Calculated	0 to 99.9%	0.1%	-	-
NO (optional)	Electrochemical	0 to 5,000 ppm	1 ppm	±5 ppm < 100 ppm ±5% rdg > 100 ppm	< 40 s
Low NO	Electrochemical	0 to 300 ppm	0.1 ppm	±1.5 ppm < 30 ppm ±5 % rdg > 30 ppm	< 40 s
NOx (optional)	Calculated	0 to 7500 ppm	1 ppm	-	-
Low NOx	Calculated	0 to 450 ppm	0.1 ppm	-	-
Flue temperature	TcK	-20 to +1250 °C -4 to +2282 °F	0.1 °C 0.1 °F	±2 °C or ±0.5% rdg ⁽²⁾ ±3.6 °F or ±0.5% rdg ⁽²⁾	-
Air temperature	NTC or TcK	-20 to +120 °C -4 to +248 °F	0.1 °C 0.1 °F	±2 °C ±3.6 °F	-
Differential temperature	Calculated	0 to 1250 °C 0 to 2282 °F	0.1 °C 0.1 °F	-	-
Pressure/Draft	Semiconductor	-200 to +200 mbar -80 to +80 inH ₂ O	0.01 mbar 0.001 inH ₂ O	±1% rdg ±0.03 mbar ±1% rdg ±0.012 inH ₂ O	-
High accuracy draft	Semiconductor	500 Pa	0.1 Pa	±0.5 Pa < 10 Pa ±3 Pa up to 150 Pa ±2 % rdg > 150 Pa	-
Excess air	Calculated	0 to 999%	1%	-	-
Efficiency	Calculated	0 to 100% (Gross/HHV ⁽³⁾)	0.1%	-	-
Efficiency (condensation)	Calculated	0 to 125% (Net/LHV ⁽⁴⁾)	0.1%	-	-
Stack Gas velocity	Calculated	0 to 99 m/s 0 to 19,500 fpm	0.1 m/s 1 fpm	-	-

⁽¹⁾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.

⁽²⁾Accuracy given for the analyzer only.

⁽³⁾For Higher Heating Value / ⁽⁴⁾For Lower Heating Value

General features

Dimensions	19.4 x 9.9 x 4.9 cm (7.5 x 3.5 x 4.9")
Weight	350 g (12 oz)
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 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 (23 to 113 °F), Hygrometry: in non-condensing conditions (< 85% RH) Maximum altitude: 2000 m (6561')
Storage temperature	From -20 to 50 °C (-4 to 122 °F)
Languages	English, French, German, Spanish, Italian, Portuguese, Chinese
European Union Directives	2014/53/EU (RED); 2015/863 EU (RoHS 3)
Regulations	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

Apps and PC software

- 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 app



Graph view

NATURAL GAS	
O ₂	4.51 %
CO	80 ppm
CO ₂	91.4 %
CO ₂	12.5 %
T-flow	170.3 m ³
NO	78 ppm
NO _x	82 ppm
Draft	1.094 mbar

Data view

Si-CA 130 kit content

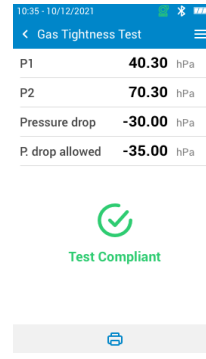
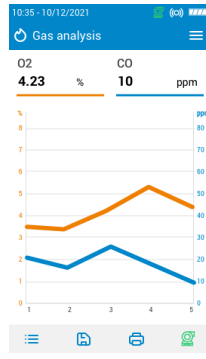
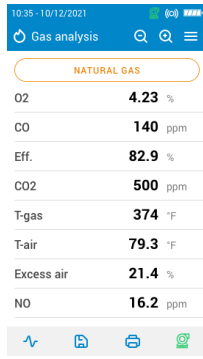
- Si-CA 130 analyzer
- O₂ & CO gas sensors (NO or low NO optional)
- Protective rubber holster
- Flue gas probe with dual hose
- Water trap with filter
- AC power supply / charger
- USB cable
- Mobile app & PC software
- Internal wireless communication module
- Carrying case
- Quick Start Guide
- Calibration certificate



Optional accessories

Part number	Description	Illustration
27520 (NO) 27521 (Low NO)	NO or Low NO sensor for NO _x	
27544	Draft probe	
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 ₂ ambient probe	
26811	SCU (Sample Conditioning Unit)	

Example of analyzer screens



Ordering Information

Item #	Description
Si-CA 130 Kit 2AS	Si-CA 130 Gas Analyzer Kit 2AS, includes two gas sensors (O ₂ , CO), 180 mm Probe rated to 800 °C (1472 °F) with 2 m dual hose, vinyl carrying case, rubber holster, water trap with filter, charger with plug set, USB-C cable, quick start guide, calibration certificate
Si-CA 130 Kit 2AH	Si-CA 130 Gas Analyzer Kit 2AH, includes two gas sensors (O ₂ , CO), 180 mm Probe rated to 800 °C (1472 °F) with 2 m dual hose, ABS hard plastic carrying case, rubber holster, water trap with filter, charger with plug set, USB-C cable, quick start guide, calibration certificate
Si-CA 130 Kit 2BS	Si-CA 130 Gas Analyzer Kit 2BS, includes two gas sensors (O ₂ , CO), 300 mm Probe rated to 800 °C (1472 °F) with 3 m dual hose, vinyl carrying case, rubber holster, water trap with filter, charger with plug set, USB-C cable, quick start guide, calibration certificate
Si-CA 130 Kit 2BH	Si-CA 130 Gas Analyzer Kit 2BH, includes two gas sensors (O ₂ , CO), 300 mm Probe rated to 800 °C (1472 °F) with 3 m dual hose, ABS hard plastic carrying case, rubber holster, water trap with filter, charger with plug set, USB-C cable, quick start guide, calibration certificate
Si-CA 130 Kit 3AS	Si-CA 130 Gas Analyzer Kit 3AS, includes three gas sensors (O ₂ , CO, NO), 180 mm Probe rated to 800 °C (1472 °F) with 2 m dual hose, vinyl carrying case, rubber holster, water trap with filter, charger with plug set, USB-C cable, quick start guide, calibration certificate
Si-CA 130 Kit 3AH	Si-CA 130 Gas Analyzer Kit 3AH, includes three gas sensors (O ₂ , CO, NO), 180 mm Probe rated to 800 °C (1472 °F) with 2 m dual hose, ABS hard plastic carrying case, rubber holster, water trap with filter, charger with plug set, USB-C cable, quick start guide, calibration certificate
Si-CA 130 Kit 3BS	Si-CA 130 Gas Analyzer Kit 3BS, includes three gas sensors (O ₂ , CO, NO), 300 mm Probe rated to 800 °C (1472 °F) with 3 m dual hose, vinyl carrying case, rubber holster, water trap with filter, charger with plug set, USB-C cable, quick start guide, calibration certificate
Si-CA 130 Kit 3BH	Si-CA 130 Gas Analyzer Kit 3BH, includes three gas sensors (O ₂ , CO, NO), 300 mm Probe rated to 800 °C (1472 °F) with 3 m dual hose, ABS hard plastic carrying case, rubber holster, water trap with filter, charger with plug set, USB-C cable, quick start guide, calibration certificate
Si-CA 130 Kit 3LowAS	Si-CA 130 Gas Analyzer Kit 3LowAS, includes three gas sensors (O ₂ , CO, Low NO), 180 mm Probe rated to 800 °C (1472 °F) with 2m dual hose, vinyl carrying case, rubber holster, water trap with filter, charger with plug set, USB-C cable, quick start guide, calibration certificate
Si-CA 130 Kit 3LowAH	Si-CA 130 Gas Analyzer Kit 3LowAH, includes three gas sensors (O ₂ , CO, Low NO), 180 mm Probe rated to 800 °C (1472 °F) with 2 m dual hose, ABS hard plastic carrying case, rubber holster, water trap with filter, charger with plug set, USB-C cable, quick start guide, calibration certificate
Si-CA 130 Kit 3LowBS	Si-CA 130 Gas Analyzer Kit 3LowBS, includes three gas sensors (O ₂ , CO, Low NO), 300 mm Probe rated to 800 °C (1472 °F) with 3 m dual hose, vinyl carrying case, rubber holster, water trap with filter, charger with plug set, USB-C cable, quick start guide, calibration certificate
Si-CA 130 Kit 3LowBH	Si-CA 130 Gas Analyzer Kit 3LowBH, includes three gas sensors (O ₂ , CO, Low NO), 300 mm Probe rated to 800 °C (1472 °F) with 3 m dual hose, ABS hard plastic carrying case, rubber holster, water trap with filter, charger with plug set, USB-C cable, quick start guide, calibration certificate

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).

www.sauermann.com

