

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 NOx)



Large color touch screen



Lightweight, only 350 g



Field replaceable pre-calibrated sensors



CO sensor measurement up to 8000 ppm



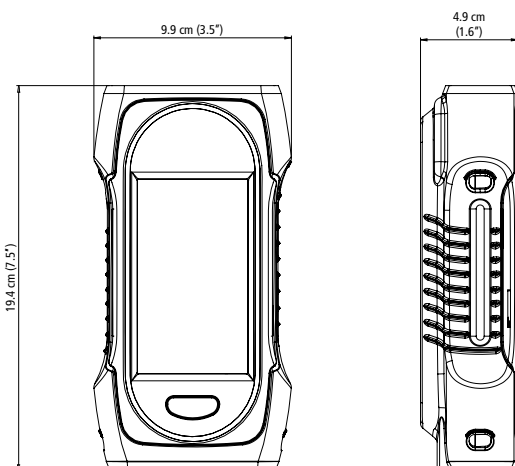
Data management with automatic logging & report creation through app/PC software



- 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)
- NOx 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 NOx & 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 (optional)	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 (optional)	Calculated	0 to 450 ppm	0.1 ppm	-	-
Flue temperature	TcK	-20 to +1250 °C	0.1 °C	±2 °C or ±0.5% rdg ⁽²⁾	-
Air temperature	NTC or TcK	-20 to +120 °C	0.1 °C	±2 °C	-
Differential temperature	Calculated	0 to 1250 °C	0.1 °C	-	-
Pressure/Draft	Semiconductor	-200 to +200 mbar	0.01 mbar	±1% rdg ±0.03 mbar	-
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
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, depending on smartphone radio strength. Minimum required versions: Android 8.0, iOS 12.4, BLE 4.0 Low Energy or compatible - 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: 2000 m
Storage temperature	From -20 to 50 °C
Languages	English, French, German, Spanish, Italian, Portuguese, Simplified 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	
O2	4.51 %
CO	80 ppm
Eff. Eff.	91.4 %
CO2	12.5 %
T-flue	170.3 °C
NO	78 ppm
NOx	82 ppm
Dust	1.094 mg/m ³

Data view

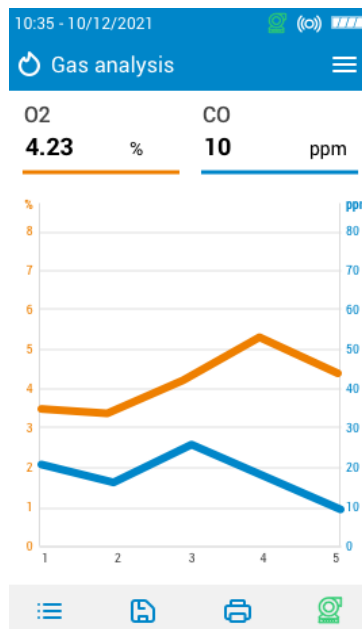
Example of analyzer screens

10:35 - 10/12/2021

Gas analysis

NATURAL GAS

O2	4.23 %
CO	140 ppm
Eff.	82.9 %
CO2	500 ppm
T-gas	374 °F
T-air	79.3 °F
Excess air	21.4 %
NO	16.2 ppm



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Gas Tightness Test

P1	40.30 hPa
P2	70.30 hPa
Pressure drop	-30.00 hPa
P. drop allowed	-35.00 hPa

Test Compliant

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 (Free download)
- Internal wireless communication module
- Vinyl carrying bag
- Quick Start Guide
- Calibration certificate



Ordering Information

Item #	Description
Si-CA 130 Kit 2AS (27507)	Si-CA 130 Gas Analyzer Kit 2AS, includes two gas sensors (O ₂ , CO), upgradeable to three gas sensors (NO/NO _x or Low NO/Low NO _x), 180 mm probe rated to 800 °C with 2 m dual hose, wireless connection to mobile app and remote printer (option), rubber holster, water trap with filter, charger with plug set, USB-C cable, quick start guide, calibration certificate and vinyl carrying bag
Si-CA 130 Kit 2BS (27509)	Si-CA 130 Gas Analyzer Kit 2AS, includes two gas sensors (O ₂ , CO), upgradeable to three gas sensors (NO/NO _x or Low NO/Low NO _x), 300 mm probe rated to 800 °C with 3 m dual hose, wireless connection to mobile app and remote printer (option), rubber holster, water trap with filter, charger with plug set, USB-C cable, quick start guide, calibration certificate and vinyl carrying bag
Si-CA 130 Kit 3BS (27513)	Si-CA 130 Gas Analyzer Kit 3BS, includes three gas sensors (O ₂ , CO, NO/NO _x), 300 mm probe rated to 800 °C with 3 m dual hose, wireless connection to mobile app and remote printer (option), rubber holster, water trap with filter, charger with plug set, USB-C cable, quick start guide, calibration certificate and vinyl carrying bag
Si-CA 130 Kit 3LowBS (27517)	Si-CA 130 Gas Analyzer Kit 3LowBS, includes three gas sensors (O ₂ , CO, Low NO/Low NO _x), 300 mm probe rated to 800 °C with 3 m dual hose, wireless connection to mobile app and remote printer (option), rubber holster, water trap with filter, charger with plug set, USB-C cable, quick start guide, calibration certificate and vinyl carrying bag

Optional accessories

Part number	Description	Illustration
27532 (180 mm) 27533 (300 mm) 27534 (750 mm) 27535 (1 m) 27536 (1.5 m)	180 mm probe rated to 800 °C with 2 m dual hose 300 mm probe rated to 800 °C with 3 m dual hose 750 mm probe rated to 800 °C with 3 m dual hose 1 m probe rated to 1200 °C with 3 m dual hose 1.5 m probe rated to 1200 °C with 3 m dual hose All probes include thermocouple K type sensor, water trap with filter, connectors to device	
27546	Remote wireless printer	
27537	3 m dual hose extension	
27538	Differential pressure hose kit	

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).