

DATA SHEET

Si-CA 130



Residential & commercial combustion analyzer

The latest in combustion analysis technology

Compact, Light and Durable Design



Note: Phone not included.

TOUCH SCREEN



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



Lightweight, only 350 g (12 oz)



CO sensor measurement up to 8000 ppm



Large color touch screen



Field replaceable pre-calibrated sensors



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



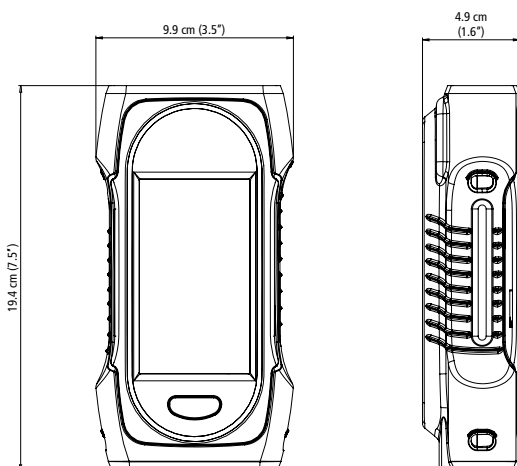
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Download on the
App Store

- 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)
- 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 | 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 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 °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

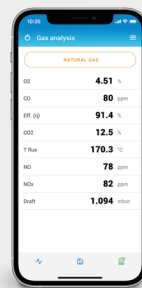
- Free apps for iOS & Android mobile devices
- PC software with USB & wireless connectivity
- Fast, easy wireless connection
- Remote live view of combustion analysis data as list or graph
- Remote control to change settings
- Data saving, including automatic logging
- Report creation in PDF, CSV (for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



Download app



Graph view














Data view

Si-CA 130 kit content

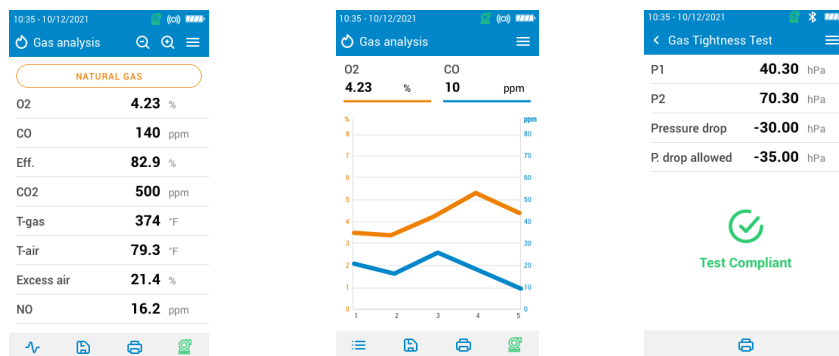
- Si-CA 130 analyzer
- O₂ & CO gas sensors (NO or low NO optional)
- Protective rubber holster
- Flue gas probe with dual hose
- Water trap with filter
- AC power supply / charger
- USB cable
- Mobile app & PC software
- Internal wireless communication module
- Carrying case
- Quick Start Guide
- Calibration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



Optional accessories

| Part number | Description | Illustration |
|--|--|---|
| 27520 (NO) 27521 (Low NO) | NO or Low NO sensor for NOx |  |
| 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 |  |
| SC0110B | CO ambient probe |  |
| SC0112B | 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 |
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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.sauermanngroup.com

