

DATA SHEET

# Si-CA 030

**Residential & commercial combustion analyser**  
**The latest in combustion analysis technology**

**Compact, Light and Durable Design**



Up to three gas sensors O<sub>2</sub>, CO, and NO/NOx



Color display screen



Lightweight, only 350 g



Auto pump cut-off for high CO levels protection



CO sensor measurement up to 8,000 ppm



Data management with automatic logging & report creation



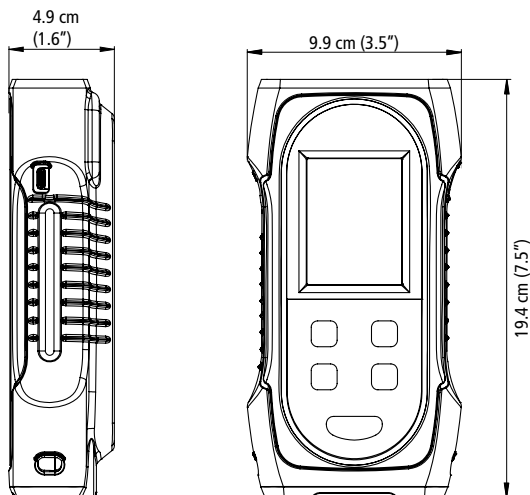
Note: Phone not included.



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

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

**Dimensions**



**Compact design**



## Parameter specifications

| Parameter                 | Sensor          | Measuring range                       | Resolution | Accuracy <sup>(1)</sup>   | T <sub>90</sub> response time |
|---------------------------|-----------------|---------------------------------------|------------|---|-------------------------------|
| O <sub>2</sub>            | Electrochemical | 0 to 25%                              | 0.01%      | ±0.2% vol   | < 30 s                        |
| CO                        | Electrochemical | 0 to 8000 ppm                         | 1 ppm      | ±8 ppm < 160 ppm<br>±5% rdg up to 2000 ppm<br>±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      | ±5 ppm < 100 ppm<br>±5% rdg > 100 ppm                             | < 40 s                        |
| NOx (optional)            | Calculated      | 0 to 7500 ppm                         | 1 ppm      | -   | -                             |
| Flue temperature          | TcK             | -20 to +1250 °C                       | 0.1 °C     | ±2 °C or ±0.5% rdg <sup>(2)</sup>                                 | -                             |
| 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 <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                      | 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.<br>Range up to 15 m, depending on smartphone radio strength.<br>Minimum required versions: Android 8.0, iOS 12.4, BLE 4.0 Low Energy or compatible<br>- USB |
| Power supply                    | Rechargeable battery, USB power supply<br>Li-Ion 5100 mA/h 3.6 V battery / Power supply voltage of the mains unit: 100-240 Vac, 50-60 Hz<br>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,<br>Hygrometry: in non-condensing conditions (< 85% RH)<br>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 10389; UL & cUL Certification;<br>BS 7967:2015; BS EN 50543:2011; UNE 60670-10; ES.02173.ES   |

## Apps

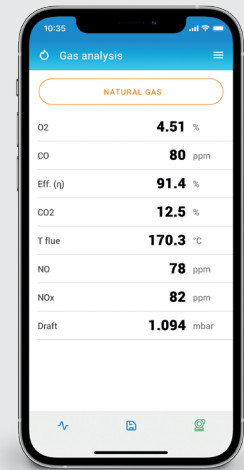
- Free apps for iOS & Android mobile devices
- Fast, easy wireless connection
- Remote live view of combustion analysis data as list or graph
- Remote control to change settings
- Data saving, including automatic logging
- Report creation in PDF, CSV (for Excel) and XML formats
- Databases for customers,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



Download app

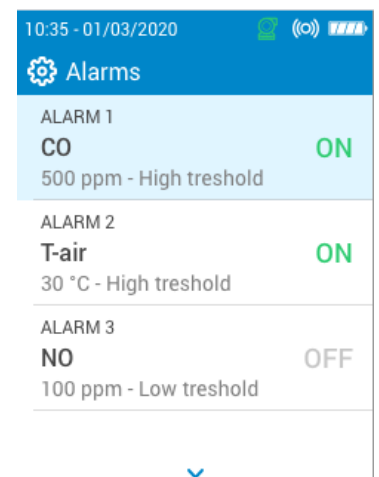
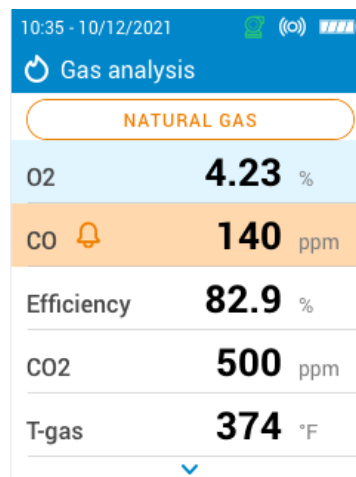
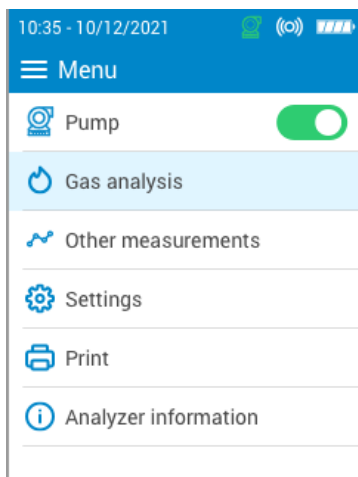


Graph view



Data view

## Example of analyzer screens



## Si-CA 030 kit content





- Si-CA 030 analyzer
- O<sub>2</sub> & CO gas sensors (NO/NOx 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 030 Kit 2AS (27496) | Si-CA 030 Gas Analyzer Kit 2AS, includes two gas sensors (O <sub>2</sub> , CO), upgradeable to three gas sensors (NO/NOx), 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 030 Kit 2BS (27498) | Si-CA 030 Gas Analyzer Kit 2BS, includes two gas sensors (O <sub>2</sub> , CO), upgradeable to three gas sensors (NO/NOx), 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 030 Kit 3BS (27503) | Si-CA 030 Gas Analyzer Kit 3BS, includes three gas sensors (O <sub>2</sub> , CO, NO/NOx), 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)<br>27533 (300 mm)<br>27534 (750 mm)<br>27535 (1 m)<br>27536 (1.5 m) | 180 mm probe rated to 800 °C with 2 m dual hose<br>300 mm probe rated to 800 °C with 3 m dual hose<br>750 mm probe rated to 800 °C with 3 m dual hose<br>1 m probe rated to 1200 °C with 3 m dual hose<br>1.5 m probe rated to 1200 °C with 3 m dual hose<br><br>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).