

DATA SHEET

Si-CA 030



Note: Phone not included.

Residential & commercial combustion analyser
The latest in combustion analysis technology

Compact, Light and Durable Design

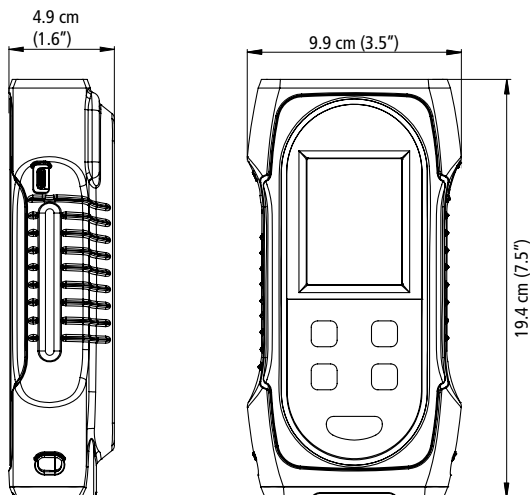
- Up to three gas sensors O₂, CO, and NO (for NOx)
- Color display screen
- Lightweight, only 350 g (12 oz)
- Auto pump cut-off for high CO levels
- CO sensor measurement up to 8,000 ppm
- Data management with automatic logging & report creation



- Predictive maintenance with estimated sensor life & calibration reminders
- Draft & differential pressure measurements
- Calculated CO₂% 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 ⁽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 5000 ppm | 1 ppm | ±5 ppm < 100 ppm ±5% rdg > 100 ppm | < 40 s |
| NOx (optional) | Calculated | 0 to 7500 ppm | 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 | - |
| | Pt100 | -40 to 250 °C -40 to 482 °F | 0.1 °C 0.1 °F | ±(0.3% rdg ±0.25) °C -40°F to 32 °F: ±(-0.3% rdg +0.6) °F 32°F to 482 °F: ±(0.3% rdg +0.4) °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 | - |
| 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% | - | - |

⁽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 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 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 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 |
| 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; TÜV SÜD Certification |

Apps

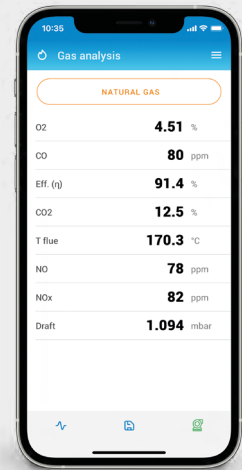
- Free apps for iOS & Android mobile devices
- Fast, easy wireless connection
- Remote live view of combustion analysis data as list or graph
- Remote control to change settings
- Data saving, including automatic logging
- Report creation in PDF, CSV (for Excel) and XML formats
- Databases for customers,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



Download app

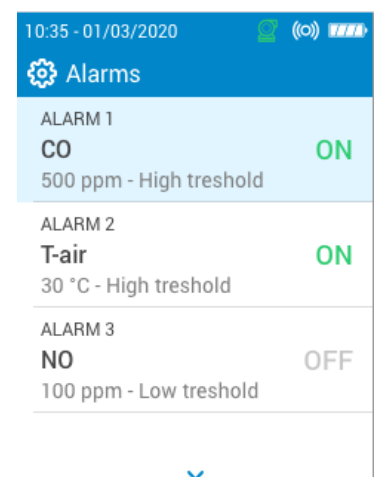
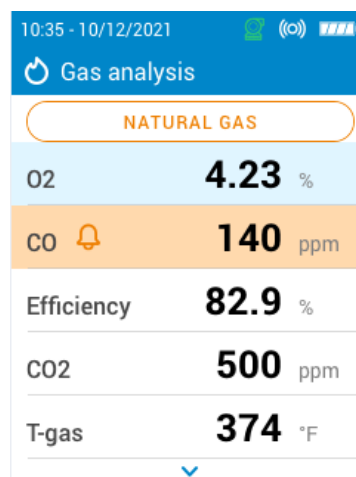
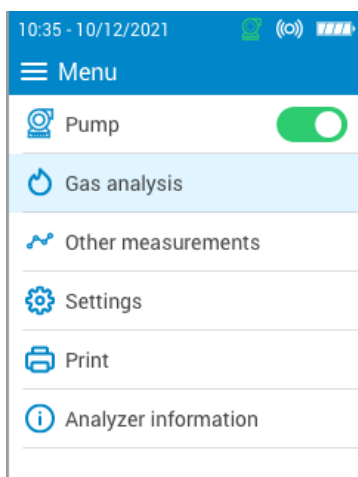


Graph view



Data view

Example of analyzer screens



Si-CA 030 kit content

- Si-CA 030 analyzer
- O₂ & 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

| Item # | Reference | Description |
|-------------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Si-CA 030 Kit 2AC | 27495 | Si-CA 030 Gas Analyzer Kit 2AC, includes two gas sensors (O ₂ , CO), 180 mm, probe rated to 800 °C with 2 m dual hose, cardboard box packaging |
| Si-CA 030 Kit 2AS | 27496 | Si-CA 030 Gas Analyzer Kit 2AS, includes two gas sensors (O ₂ , CO), 180 mm, probe rated to 800 °C with 2 m dual hose, vinyl carrying case |
| Si-CA 030 Kit 2AH | 27497 | Si-CA 030 Gas Analyzer Kit 2AH, includes two gas sensors (O ₂ , CO), 180 mm, probe rated to 800 °C with 2 m dual hose, ABS hard plastic carrying case |
| Si-CA 030 Kit 2BS | 27498 | Si-CA 030 Gas Analyzer Kit 2BS, includes two gas sensors (O ₂ , CO), 300 mm, probe rated to 800 °C with 3 m dual hose, vinyl carrying case |
| Si-CA 030 Kit 2BH | 27499 | Si-CA 030 Gas Analyzer Kit 2BH, includes two gas sensors (O ₂ , CO), 300 mm, probe rated to 800 °C with 3 m dual hose, ABS hard plastic carrying case |
| Si-CA 030 Kit 3AC | 27500 | Si-CA 030 Gas Analyzer Kit 3AC, includes three gas sensors (O ₂ , CO, NO), 180 mm, probe rated to 800 °C with 2 m dual hose, cardboard box packaging |
| Si-CA 030 Kit 3AS | 27501 | Si-CA 030 Gas Analyzer Kit 3AS, includes three gas sensors (O ₂ , CO, NO), 180 mm, probe rated to 800 °C with 2 m dual hose, vinyl carrying case |
| Si-CA 030 Kit 3AH | 27502 | Si-CA 030 Gas Analyzer Kit 3AH, includes three gas sensors (O ₂ , CO, NO), 180 mm, probe rated to 800 °C with 2 m dual hose, ABS hard plastic carrying case |
| Si-CA 030 Kit 3BS | 27503 | Si-CA 030 Gas Analyzer Kit 3BS, includes three gas sensors (O ₂ , CO, NO), 300 mm, probe rated to 800 °C with 3 m dual hose, vinyl carrying case |
| Si-CA 030 Kit 3BH | 27504 | Si-CA 030 Gas Analyzer Kit 3BH, includes three gas sensors (O ₂ , CO, NO), 300 mm, probe rated to 800 °C with 3 m dual hose, ABS hard plastic 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 | Illustration |
|----------------------------------------------------|--------------------------------------------|---------------------------------------------------------------------------------------|
| 27521 | NO sensor for NOx |  |
| 27532 (180 mm) 27533 (300 mm) 27534 (750 mm) | 180, 300 and 750 mm probes available |  |
| 27936 | 180 mm flexible probe |  |
| 24646 | Smart air temperature probe with 2 m cable |  |
| 27865 | Pt100 temperature probe |  |
| 27547 | CO ambient probe |  |
| 27548 | CO ₂ ambient probe |  |
| 27546 | Remote wireless printer |  |
| 27537 | 3 m dual hose extension |  |
| 27538 | Differential pressure hose kit |  |
| 11994 | Manual smoke pump kit |  |
| 26811 | SCU (Sample Conditioning Unit) |  |

*See the Si-CA analyser accessories datasheet for more details.