



## Product Data Sheet

# S1450CO

CO detector, 0-300 ppm, 4-20mA

### General

---

The SMART3 NC gas detectors represent a non certified version of the SMART3G line and are ideal for non classified areas and car parks. They employ high quality catalytic sensors, electrochemical cells or infrared sensors, that grant an excellent linearity and accuracy, besides an estimated lifetime of 4 years.

### Interface

---

The SMART 3NC gas detectors provide a proportional 4-20mA output signal. By using optional boards they can either communicate via RS485 serial bus or provide relay outputs. The available outputs are as follows:

- 4-20 mA. Proportional 4-20mA output current corresponding to the full range (LEL or ppm).
- Relay. By adding the FGA110 / STS3REL board, the detector is expanded with 3 potential free relay outputs. One relay is dedicated to the Fault and Watch-dog, while the remaining two relays can be associated with two out of the three available alarm thresholds.
- Serial RS485. By adding the FGC2485C / STSIDI interface, the detector can communicate on the RS485 bus with SENTOX IDI+ and MULTISCAN++S1 gas control panels.



### Standard Features

---

- Superior repeatability and durability
- Microprocessor controlled
- Self diagnostic features
- Drift compensation
- Digital filter
- 4-20mA standard
- Optional relay board
- Optional RS485 board
- 4 year estimated lifetime

# S1450CO

CO detector, 0-300 ppm, 4-20mA

## Specifications

Detectable gas	CO
Sensing element	Electrochemical cell
Measurement range	0-300 ppm
Power supply	
Voltage	12-24 Vdc, -20% + 15%
Current	40 mA
Output	
Proportional	4-20mA
Resolution	0.025mA
3 Relays	with use of FGA110 / STS3REL
RS485	with use of FGC2485C / STS/IDI
Timing	
Warm up time	5 minutes
Stabilization time	< 2 minutes
Response time	
T50	< 20 sec
T90	< 60 sec
Calibration period	3 to 12 months (depending on environment)
Estimated lifetime	4 years
Environmental	
Storage temperature	-25 to +60 °C
Operating temperature	-10 to +60 °C
Relative Humidity	20 - 90 % non condensing
IP Rating	IP55
Operating pressure	80 - 110 KPa
Air velocity	< 6 m / s
Mechanical	
Size (l x h x d)	100 x 180 x 65 mm
Weight	600 g
Orientation	Sensor head downwards
Classification	non-classified

## Ordering Information

Part No.	Description
S1450CO	CO detector, 0-300 ppm, 4-20mA
S2396ME	Methane detector, 0-100%LEL, 4-20mA
S2396GP	LPG detector, 0-100%LEL, 4-20mA
S2396VB	Petrol vapour detector, 0-100%LEL, 4-20mA
S2401CO2	CO2 detector, 0-5000 ppm, 4-20mA
FGA101	Handheld calibration keypad for Smart 3 series gas detectors
FGA102	Adaptor for gas calibration
FGA110	3 relay output card for Smart 3 series gas detectors

## Features

The SMART3 NC detectors use a powerful microprocessor that provides the following built-in features:

- Selfdiagnostic procedures to control the correct operation of the hardware and sensor.
- Zero follower to maintain the detector zero point, from possible drift caused by thermal or physical variations of the transducer.
- Digital filter, employed in the digital analysis of the analog sampled values. This filter corrects temporary phenomena from causing reading errors or false alarms.
- Hysteresis cycle: applied to the outputs associated to the alarm thresholds, it prevents continuous output switching when close to the threshold values.

The SMART3 NC detectors offer fast and failsafe installation as well as an easy maintenance and calibration via the handheld keypad FGA101 / STS/CKD.

