

S-C02

CO_a sensor with digital and analog outputs



Accurate device to measure CO₂ concentration reliably

Long-term stability and dependability

Dual detection measurement

Non-dispersive infrared (NDIR)

Analog output (0-10V)



Can be adapted to different markets and applications



Compact design, simple to install, ready to use



No maintenance



A reliable solution engineered to accurately measure indoor air quality

Most new buildings in developed countries are nearly air-tight, entailing a risk of poor indoor air quality if there is a lack of ventilation. Indoor air quality can generally be assessed by measuring the concentration of carbon dioxide, known to be representative of indoor air conditions. Aereco introduces the new S-CO2, an effective $\rm CO_2$ sensor specially designed to accurately assess indoor $\rm CO_2$ concentrations. The S-CO2 is useful in many places (such as schools, office buildings, and private homes) where the concentration of $\rm CO_2$ can vary with the occupancy and use of the rooms. Adaptable to different applications, it can be used to control ventilation, air-conditioning, and other HVAC systems. The S-CO2 is ready-calibrated for a long maintenance-free life. It is compact, and can be installed inconspicuously. **The S-CO2, a reliable and accurate device that helps systems optimize indoor air quality.**

A smart, versatile device that ensures a accurate monitoring of indoor air quality

Its technologies ensure long-term stability and performance: the S-CO2 is pre-calibrated to measure, in real time, indoor CO_2 concentrations from 0 to 2 000 ppm, and it delivers analog (0-10 V) output signals. Thanks to its dual detection measurement technology, the S-CO2 can be placed in any room, at any time, whatever the installed system. This intelligent accessory ensures unfailing dependability whatever the use of the room. The S-CO2 is tested, validated, and documented. It is compatible with all types of installation, and will last as long as the installation. The Aereco CO_2 sensor uses the NDIR technology, a selective CO_2 technology that ensures good indoor air quality assessment. Moreover it is auto-calibrated.







S-C02 CO_2 sensor with digital and analogic outputs

		S-C02
Standard code		CAP1159
Measurement principle		Non-Dispersive Infrared Technology (NDIR), Dual-Source Infrared System
Working range	ppm CO ₂	$0\ 2\ 000\ \mathrm{ppm}\ \mathrm{CO}_2$
Accuracy at 25°C and and 1 013 mbar	ppm	± (60 ppm +2 % of measured value)
Response time		< 195 s
Temperature dependence	CO ₂ /°C	typ. 2 ppm CO ₂ / °C (050°C)
Long-term stability	ppm / year	typ. 20 ppm / year
Measurement reporting interval		60 s
Supply voltage	VDC	12 VDC +/- 10 %.
Average power consumption	A	120 mA (reading), 10 mA (base).
Max. peak current	Α	1 A (use for fuse sizing)
Enclosure protection		IP 20
Working and storage conditions		-4060°C 595 % RH (without condensating) 85110 kPa
0-10 V analog output		
Output data		0 to 10 V. 0 V = 0 ppm ; 10 V = $2 000 \text{ ppm}$
Voltage	V	0 to 10 V
Required impedence	Ω	>1MΩ
Characteristics		
Weight	g	80.5 g
Colour		white
Material		ABS

Dimensions in mm





