

Senseair Sunlight CO₂



World's most power efficient CO₂ sensor with NDIR technology

Compliant with HVAC and building standards, we now launch Senseair Sunlight – the world's most power efficient NDIR CO₂ sensor. Sunlight can be used in a wide range of applications but is optimal for battery and wireless applications or in places where you want to secure a reliable and secure sensor with long lifetime.

The module is designed for simple integration into products. The optical solid state design with no moving parts makes this sensor robust and resistant to vibrations.

With our automatic baseline correction Sunlight is maintenance-free, which means that you can mount and forget your sensor during its whole lifetime and it will still be accurate.

Standard specification

Article No.	006-1-0100
Measured gas	Carbon dioxide (CO ₂)
Operating principle	Non-dispersive infrared
Measurement range (CO ₂)	400–5000ppm; extended range up to 10000ppm
Accuracy (CO ₂)	±50ppm ±3% of reading ^{1,2} (extended range ±10% of reading)
Average current	1–30µA
Measurement period	Default: 16s, 8 samples (adjustable by host)
Peak current	< 80mA
Power supply	3.05–5.5V ³
Dimensions	34 x 21 x 12mm
Weight	5g
Life expectancy	> 15 years
Operating range	0–50 °C, 0–85% RH
Storage temperature	-40–70 °C
Serial communication	UART, I ² C

*
Note 1: 15–35 °C, 0–80% RH, after 3 ABC (Automatic Baseline Correction) periods and default measurements settings.

Note 2: Specification is referenced to uncertainty of calibration gas mixtures (±1%).

Note 3: Unprotected against surges and reverse power supply polarity.

Key benefits

- Ultra Low Power consumption
- Compliant with ANSI/ ASHRAE Standard 62.1-2022
- Compliant with RESET grad B
- Compliant with WELL Building Standard® (WELL v2™)
- High Precision
- Robust
- Mass Production
- Self-correcting

