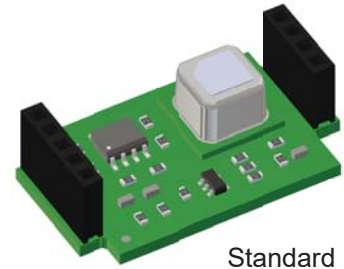


Agrowtek's new SX-CO2 gas sensor modules use new photo-acoustic gas sensing technology to deliver accurate readings up to 40,000 ppm. Compatible with all SXC, SXE, SXG, SXW and other environment sensors from Agrowtek, or with Senseair S8 sensor applications.

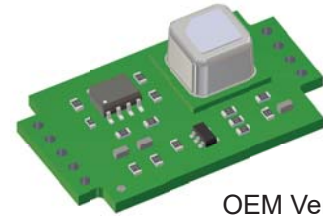
Robust CO2 sensor element features a metallic housing and a hydrophobic filter element which prevents contamination from moisture and fine particles. The superior filter element provides enhanced protection from sensor drift and damage in agricultural environments.

### Senseair S8 Replacement

SX-CO2 sensor module is a drop-in replacement for Senseair S8 series CO2 sensors. Compatible dimensions, pinout, commands and voltage levels allow seamless replacement of sensors in the field without firmware or hardware updates. *Currently only supports UART commands.*



Standard



OEM Version

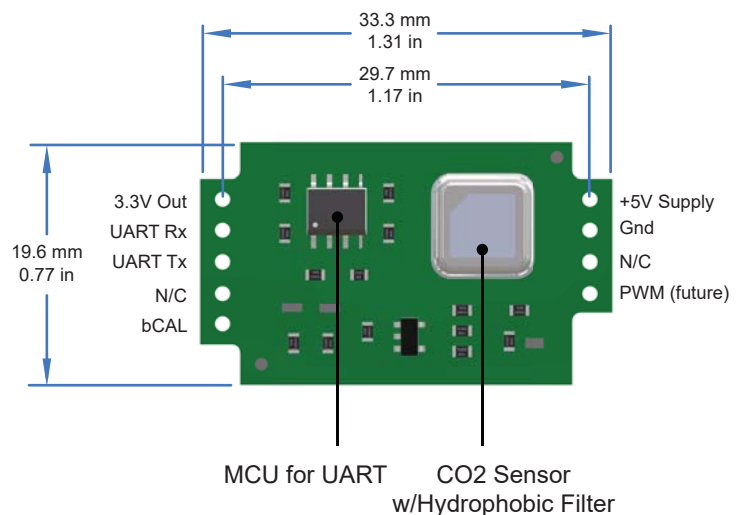
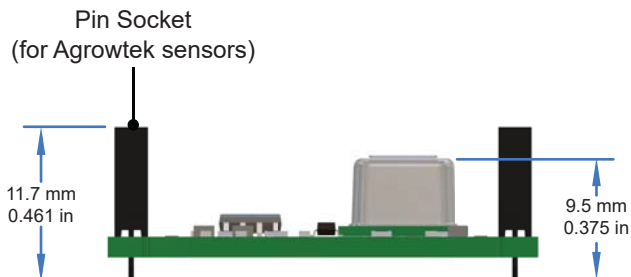


### Features

- Photoacoustic NDIR Carbon Dioxide Sensor  
0 - 40,000 ppm
- Hydrophobic Moisture Barrier Filter  
Prevent Contamination Error
- Robotic Conformal Coat  
Protected PCB and Components
- 1-Year Warranty
- Assembled in USA

### Specifications

Gas Detection	Carbon Dioxide (CO2)
Measurement Range	0 - 40,000 ppm
Repeatability	±10 ppm
Accuracy	Standard: 400-2000 ppm ± (50 ppm + 5% of reading) Precision: 400-5000 ppm ± (40 ppm + 5% of reading)
Response Time, T63	60 seconds
Supply Voltage	5 Vdc ± 0.25Vdc
Supply Current	18mA Typical, 120mA peak
3.3V Reference Out	±0.3V, 10mA max
Temperature Rating	-10 - 60°C
Humidity, Operating	0 - 95% (non-condensing)
UART	3.3V (No Flow Control) w/10Kohm Pull Up
ABC/ASC Algorithm	Optional Automatic Calibration Algorithm
Header Spacing	0.1"
Conformal Coat	Top Side, Robotic Selective Coated



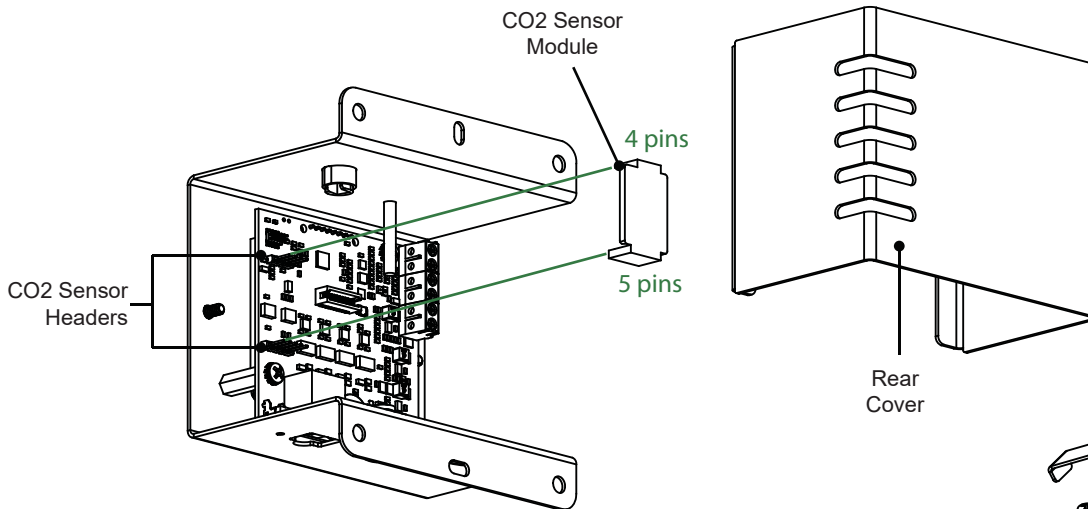
# SX-CO2

## Carbon Dioxide Gas Sensor

### Installation Instructions

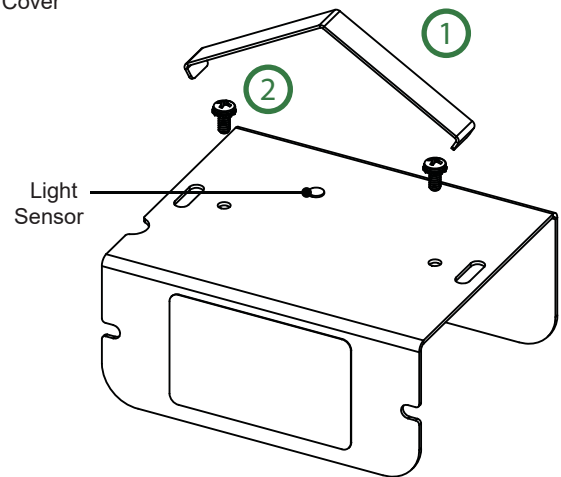
#### SXE/SXG Environment Sensors

1. Disconnect power from the sensor.
2. Remove the rear cover by removing the two screws; use caution not to damage the fan wires.
3. Locate the CO2 headers. One header is 4-pins and the other is 5-pins.
4. Position and install the CO2 sensor module ensuring the sensor is oriented with the correct pin headers.
5. Re-install the rear cover and re-connect power. Check to ensure the CO2 reading is now working.



#### SXC Environment Sensors

1. Disconnect cables from the sensor.
  2. Remove the hanging bracket (1).
  3. Take note the orientation of the light sensor on the cover.
  4. Remove the two cover screws (2) and lift off the cover.
  5. Locate the CO2 headers on the circuit board.
  6. Position and install the CO2 sensor module (3).
- Important: Ensure the sensor is oriented correctly.*
7. Re-install the top cover and re-connect cables.
- Check the light sensor orientation is correct and not backwards.*
8. Check to ensure the CO2 reading is now working.



**IMPORTANT:**  
Installing the sensor backwards will damage the module.

### Ordering Options

#### SX-CO2-P-X

- X: OEM without Sockets  
None: Standard with Sockets
- P: Precision  $\pm 40$ ppm Element  
None: Standard  $\pm 50$ ppm Element
- SX-CO2 Gas Sensor Module

