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Carbon Dioxide Sensor

CWS Part Number: 82900

Revision A, 7/25/2016

The Carbon Dioxide (CO₂) Sensor uses an infrared light source to measure ppm-level carbon dioxide. The sensor is configured for analog output.



TECHNICAL SPECIFICATIONS

Measurement Range: 0 – 1000 ppm CO₂

Accuracy (including repeatability and non-linearity): ±40 ppm CO₂ at 77 °F and 29.91 inHg

Output: 0 – 2.5VDC

Operating Temperature: -40°F to +140°F (-40°C to +60°C)

Power:

Operating voltage: 12 - 30 VDC

Power consumption: 0.4 W in continuous operation

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INSTALLATION

The sensor is mounted inside a self-aspirating radiation shield to protect it from the effects of solar radiation.

Install the sensor in a location that represents ambient atmospheric CO₂ levels.

Mount the sensor to a vertical pole using the included U-bolt.

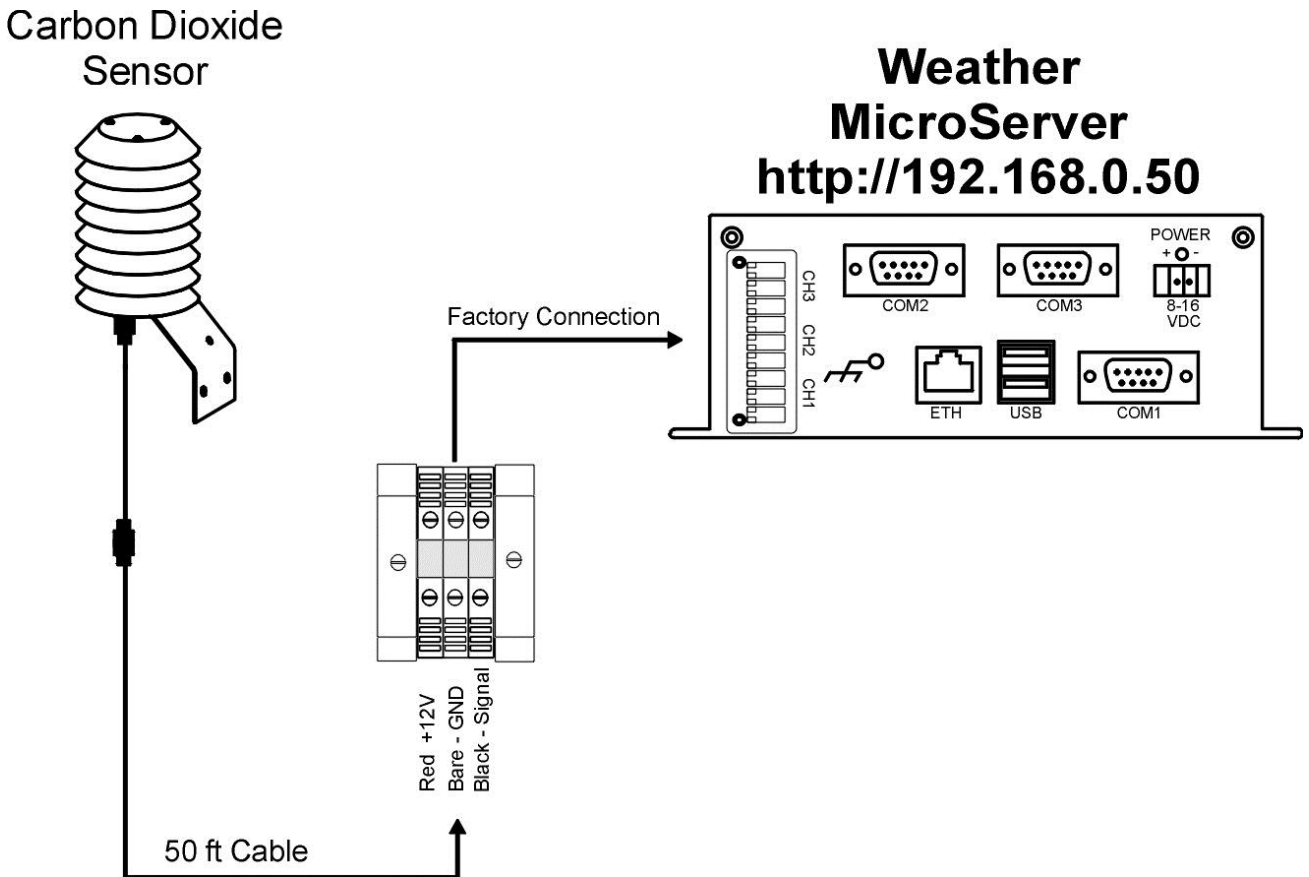
Warning: Do not mount the sensor near CO₂ emissions.



CONNECTING TO THE MICROSERVER

The sensor connects to any one of the Analog Channels on the MicroServer.

Connect the cable leads from the sensor to the provided terminal blocks as shown below:



CLEANING

The probe can be cleaned with a moist cloth. Do not immerse the probe in liquid to clean it.

The following chemicals can be used to clean the probe:

- Hydrogen Peroxide (2000 ppm), non-condensing
- Alcohol-based cleaning agents such as ethanol and IPA (70 % Isopropyl Alcohol, 30 % water)
- Acetone
- Acetic acid

When changing the filter, compressed air can be used to gently blow any loose dirt from the sensor. Do not attempt to clean the optical surfaces in any other manner.