

GreenSens GS and TA Series CO₂ Measurement Series Overview

Non-Dispersive Infra Red (NDIR) CO2 Measurement with ABC Logic

The GS and TA Series CO_2 sensors use NDIR technology to determine the CO_2 level. NDIR uses an infra-red light source through a patented wave guide that filters the infra-red signature of the CO_2 gas to a thermopile receiver. Automatic background calibration (ABC logic) ensures years of calibration free performance when enabled. ABC logic essentially uses the unoccupied CO_2 level over an extended period of time to adjust the calibration of the sensor. ABC logic should not be enabled if the facility doe not have unoccupied periods of operation.

GreenTrol CO₂ sensors are available in wall and duct mount models, with some models having additional sensing capability.

GS-N100-W CO₂ Sensor - Wall Mount

The GS-N100-W is a high performance CO_2 sensor in an attractive enclosure. It is ideal for today's demanding DCV applications. The GS-N100-W time-tested and reliable BACnet MS/TP and Modbus RTU firmware is superior to competitive CO_2 sensors. Its reliability makes it the only approved network wall mounted CO_2 sensor for GreenTrol outdoor air controllers.



GS-N300-W CO₂/RH/Temperature Sensor - Wall Mount

The GS-N300-W is is essentially the GS-N100-W package with the addition of a relative humidity and space temperature sensor.

GS-N100-D CO₂ Sensor - Duct Mount with Pitot Sampling Tube

The GS-N100-D is a high performance CO_2 sensor that comes with a pitot sampling tube that is inserted into a duct. It is provided with tubing and an inline filter that allows the pitot tube to sample from return air ducts for DCV applications. The GS-N100-D time-tested and reliable BACnet MS/TP and Modbus RTU firmware is superior to competitive CO_2 sensors. Its reliability makes it the only approved network duct mounted CO_2 sensor for GreenTrol outdoor air controllers.



The TA-A8041-D and TA-8042-D CO_2 sensors are designed to be mounted through the side of a duct or plenum. The sensor is typically mounted in the return air duct or plenum near or at the air handler prior to the introduction of outdoor air. The sensor outputs a 0-10 VDC signal for CO_2 and is compatible with any GreenTrol controller that accepts an analog output CO_2 sensor.







TA-A8031-D CO₂ Sensor - Duct Mount Module

The TA-A8031-D CO₂ sensor is designed to be mounted inside of a duct or plenum. The sensor is typically mounted in the return air duct or plenum near or at the air handler prior to the introduction of outdoor air. The sensor outputs a 0-10 VDC signal for CO₂ and is compatible with any GreenTrol controller that accepts an analog output CO₂ sensor.

