

Application Note

TG Sensor Placement



6/2/2020

153-0040-0E

PRODUCTS/DESCRIPTION

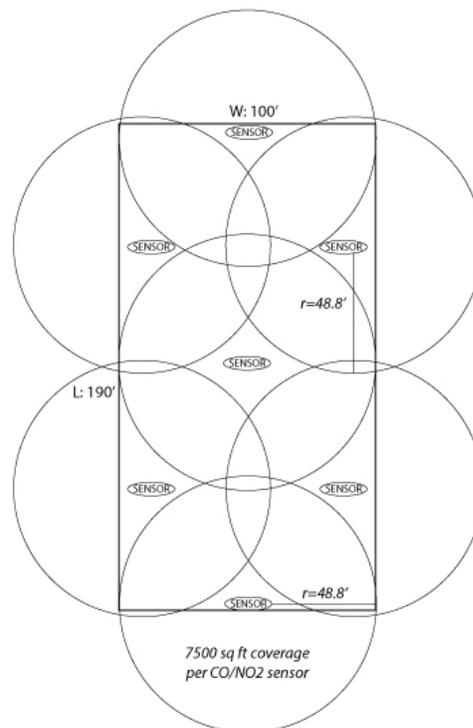
Products: Senva TG Series

Description: Recommendations for sensor placement based on sensing coverage of the Senva TG Series

OVERVIEW

Senva recommendations for coverage area and mounting height can be found in the TG installation manual. Wall sensors should be mounted in a vertical orientation or within the recommended pickup tube length based on duct airflow.

For a visualization of proper placement of Senva TG sensors, see the diagram below:



Note: All points inside the structure are within 50' of a Senva TG sensor (for 7500 square foot recommendation). This is a manufacturer recommendation. Consult local and state building codes to ensure coverage is adequate for the monitored space. For sensors covering 5000 square feet, radius should be no more than 39'.

SENSOR MOUNTING HEIGHTS

The height at which you mount the sensor depends on the density of the gas you are monitoring relative to air and the application of the gas sensor. Consult TGUL Series Installation Manual for recommendations for each type of gas.

If the application is purely leak detection of the target gas then the following mounting heights should be considered based on the density of the gas you are monitoring relative to air:

-When detecting gases that are heavier than air the Senva gas sensor should be placed 1 to 3 feet from the floor. When gases are lighter than air the Senva gas sensor should be placed on or near the ceiling, and gases which have a density close to that of air should have sensors installed in the human “breathing zone”, which is considered 3 to 6 feet from the floor.

-If the application is air quality for humans then mounting the sensors in the human “breathing zone” of 3 to 6 feet is suggested.

A gas sensor can only be effective if the sensor is in close proximity to where the leaking gas will accumulate. Gas sensors should not be placed near ventilation fans, openings to the outside or in the path of rapidly moving air such as next to a ventilation fan. They should be placed in areas where there is good air circulation and attention should be paid to “dead air spots” where there is little or no air movement. Sensors should be placed as close to the source of the gas as possible (within 39-50 feet or less). Gas sensors must see the area of coverage to be effective, i.e. do not mount behind obstructions that could impede natural air circulation.

Consideration should also be given to the accessibility of the sensor for calibration and maintenance needs when locating/mounting gas sensors.