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Senseair Sunrise CO_2 sensor meets the new Addendum ab ANSI/ASHRAE Standard 62.1-2022

CO_2 sensors provide key functions in demand-controlled ventilation (DCV), as they not only optimize energy efficiency but also significantly enhances indoor air quality, thereby providing a healthier indoor climate. They serve as reliable indicators of occupancy and human activity, ensuring that ventilation systems respond precisely to real-time conditions. This adds demands on CO_2 sensors performance to being unaffected by vibration, as CO_2 sensors used for DCV systems usually are placed near ventilation ducts where vibration cannot be avoided.

The latest addition, Addendum ab, to the ANSI/ASHRAE Standard 62.1-2022 added new specific precision criteria for CO_2 sensors at 2500 ppm concentration. This more stringent requirement emphasizes the importance of choosing well-established CO_2 sensor suppliers renowned for their quality and experience in this field. Meeting these new demands requires sensors with a robust standard of performance and accuracy.

The related requirement from the ASHRAE Addendum ab is quoted below:

*"6.2.6.1.3.4 CO_2 sensors shall be certified by the manufacturer to be accurate within ±75 ppm at concentrations of **600, 1000, and 2500 ppm** when measured **at sea level at 77°F (25°C)**. Sensors shall be factory calibrated and certified by the manufacturer to require calibration not more frequently than once every five years. Upon detection of sensor failure, the system shall provide a signal that resets the ventilation system to supply the required minimum quantity of outdoor air (Vbz) to the breathing zone for the design zone population (Pz)."*

With over 30 years of expertise, Senseair's pioneering role in the NDIR technology market is evident as we consistently push limits to produce widely recognized high-quality and cost-effective sensors. The Senseair Sunrise Sensor is a result of combining cutting-edge engineering with high performance technology, to create a pioneering product with high precision.

Explore Senseair Sunrise sensors comprehensive insights and performance metrics derived from testing procedures conducted in both the production and development departments through the following graphs:

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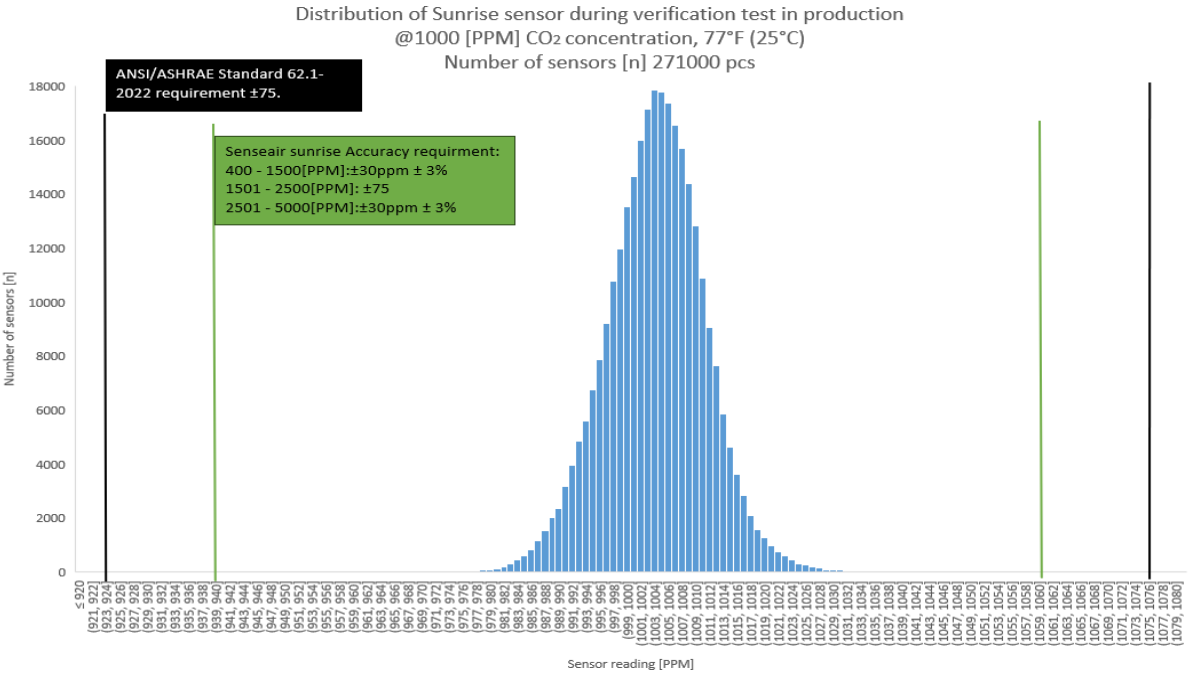
1- Production verification test at 1000[PPM] CO_2 concentration
Production logging data from now and a few months back includes 271 000 sensors during a verification point at 1000[PPM] CO_2 concentration after calibration process.
All sensors are within the updated Addendum ab, to the ANSI/ASHRAE Standard 62.1-2022, Accuracy requirement of ±75[PPM].



2- Senseair Sunrise sensors accuracy test based on the latest addition, Addendum ab, to the ANSI/ASHRAE Standard 62.1-2022:
Tested CO_2 concentrations are 400, 600, 1000, 1500, 2000 and 2500 [PPM] at temperature 77°F (25°C). All sensors are within the updated Addendum ab, to the ANSI/ASHRAE Standard 62.1-2022 (accuracy of ±75[PPM] at 600, 1000 and 2500 [PPM] CO_2 concentrations).