

AM103-Sensor_4

1. CO2 emissions Trend Analysis:

The trend in CO2 emissions shows a slight increase throughout the day, with readings ranging from 464ppm to 589ppm. The highest reading of 589ppm was recorded at 07:58 and the lowest reading of 464ppm was recorded at 10:38. However, all CO2 levels remained below the red threshold (above 800ppm), indicating that there is no immediate cause for concern in terms of high CO2 emissions.

2. Temperature Trend Analysis:

The temperature trend shows a gradual increase throughout the day, with readings ranging from 22.8°C to 24.5°C. The highest temperature reading of 24.5°C was recorded at 07:18 and the lowest temperature reading of 22.8°C was recorded at 20:38. All temperatures remained below the red threshold (above 27°C), indicating that there is no immediate cause for concern in terms of high temperatures.

3. Humidity Trend Analysis:

The humidity trend shows a fluctuation throughout the day, with readings ranging from 76.5% to 81.5%. The highest humidity reading of 81.5% was recorded at 02:18 and the lowest humidity reading of 76.5% was recorded at 19:38. All humidity levels remained below the red threshold (above 65%), indicating that there is no immediate cause for concern in terms of high humidity.

4. Conclusion:

Based on the data provided, all CO2, temperature and humidity readings remain within their respective green and amber thresholds throughout the day. There are no immediate causes for concern based on these trends.

5. Recommendation:

Continue monitoring the living room environment to ensure that CO2 levels do not exceed 800ppm, temperatures do not exceed 27°C, and humidity does not exceed 65%. Regular maintenance of air conditioning systems and proper ventilation can help maintain a healthy indoor environment.

AM103L-Sensor 5

1. CO2 emissions Trend Analysis:

The trend in CO2 emissions shows that the levels remain consistently above the green threshold throughout the data period, with an average value of approximately 830ppm. This is concerning as it indicates high levels of CO2 emission which could potentially lead to health issues and discomfort for occupants. The highest recorded CO2 level was 918ppm at 17:32:11, significantly above the red threshold.

2. Temperature Trend Analysis:

The temperature trend shows that it remains consistently below the green threshold throughout the data period with an average value of approximately 23.4°C. This is within the comfortable range for most people and indicates no immediate concern. However, there are a few instances where the temperature slightly exceeded the amber threshold (up to 25.6°C), which could potentially lead to discomfort for some individuals.

3. Humidity Trend Analysis:

The humidity trend shows that it remains consistently above the green threshold throughout the data period with an average value of approximately 79%. This is concerning as high humidity levels can lead to discomfort, mold growth and potential health issues such as respiratory problems. The highest recorded humidity level was 888% at 19:22:08, significantly above the red threshold.

4. Conclusion:

The data indicates that there are significant concerns with both CO2 emissions and humidity levels in the living room environment. These issues could potentially lead to discomfort for occupants and potential health risks if not addressed promptly.

5. Recommendation:

It is recommended to investigate the sources of high CO2 emissions and take necessary steps to reduce them, such as improving ventilation or identifying and addressing any leaks from appliances or building materials. For humidity control, consider implementing a dehumidifier or increasing air circulation to help maintain levels below the red threshold. Regular monitoring and maintenance of HVAC systems can also help ensure optimal indoor environmental conditions.

AM307-Sensor 2

1. CO2 emissions Trend Analysis:

The trend in CO2 emissions shows a slight increase over the monitored period, with values ranging from 491ppm to 638ppm. The highest CO2 level was recorded at 07:48:34 (638 ppm), which is above the red threshold of 800 ppm. This indicates a potential issue that needs attention as prolonged exposure to high levels of CO2 can lead to health issues such as headaches, drowsiness, and respiratory problems.

2. Temperature Trend Analysis:

The temperature trend shows a slight increase over the monitored period, with values ranging from 23.1°C to 24.6°C. The highest temperature was recorded at 08:58:34 (24.6°C), which is above the red threshold of 27°C. This could potentially lead to discomfort and may require adjustments such as increasing ventilation or using air conditioning to maintain a comfortable living environment.

3. Humidity Trend Analysis:

The humidity trend shows a fluctuation between 508% and 81.5%, with most readings falling below the green threshold of 60%. The lowest humidity was recorded at 04:28:34 (508%) which is in the red zone, while the highest reading was at 19:38:34 (81.5%). This variability could potentially affect comfort levels and may require adjustments to maintain a consistent humidity level for optimal health and well-being.

4. Conclusion:

The data indicates that there are potential issues with CO2 emissions, temperature, and humidity in the living room environment. The high CO2 levels and temperatures recorded exceed their respective red thresholds, while the humidity readings fluctuate significantly. These conditions could potentially lead to discomfort, health issues, or both.

5. Recommendation:

Based on the data analysis, it is recommended to take the following actions:

- Monitor CO2 levels closely and consider implementing measures such as increasing ventilation or using air purifiers to reduce CO2 levels below 800ppm.
- Maintain a consistent temperature between 23°C and 25.5°C to ensure comfort and prevent potential health issues related to high temperatures.
- Implement strategies to maintain humidity within the green zone (below 60%) such as using dehumidifiers or increasing ventilation when necessary.
- Regularly check and maintain HVAC systems, air purifiers, and other appliances that could potentially affect indoor environmental quality.

AM319-Sensor 1

1. CO2 emissions Trend Analysis:

The trend in the CO2 emissions data shows that the levels remain consistently above the green threshold of below 600ppm, with an average value of approximately 534ppm. This indicates a potential issue as the environment is persistently in the amber or red zone. The highest recorded CO2 level was 598ppm and the lowest was 471ppm.

2. Temperature Trend Analysis:

The temperature trend analysis shows that the temperatures remain consistently below the green threshold of below 25.5 degree celsius, with an average value of approximately 23.6 degrees celsius. This is within the acceptable range and there does not appear to be any significant trend or issue in this data set.

3. Humidity Trend Analysis:

The humidity trend analysis shows that the levels remain consistently below the green threshold of below 60 percentage, with an average value of approximately 78 %. This is within the acceptable range and there does not appear to be any significant trend or issue in this data set.

4. Conclusion:

In conclusion, while the CO2 emissions are persistently above the green threshold indicating a potential issue, both temperature and humidity levels remain within their respective acceptable ranges. This suggests that the high CO2 levels may not necessarily be due to environmental conditions but could potentially be caused by other factors such as human activity or equipment malfunction.

5. Recommendation:

Given the persistently high CO2 levels, it is recommended to investigate further to identify and address the root cause of this issue. This could involve checking for any potential sources of CO2 emissions within the living room environment, such as cooking appliances or heating systems, and ensuring they are functioning optimally. Additionally, regular monitoring and maintenance of these devices can help prevent future occurrences.

AM319-Sensor 3

1. CO2 emissions Trend Analysis:

The trend in CO2 emissions shows a slight increase throughout the day, with readings ranging from 458ppm to 539ppm. The highest reading of 539ppm was recorded at 19:38:26 and the lowest reading of 458ppm was recorded at 00:38:27. However, all readings are within the green threshold (below 600ppm). No significant spikes or trends indicating a potential problem area were observed.

2. Temperature Trend Analysis:

The temperature trend shows a relatively stable pattern throughout the day with temperatures ranging from 23.1°C to 25.5°C. The highest temperature of 25.5°C was recorded at 07:48:27 and the lowest temperature of 23.1°C was recorded at 23:18:27. All temperatures are within the green threshold (below 25.5°C). No significant trends or spikes indicating a potential problem area were observed.

3. Humidity Trend Analysis:

The humidity trend shows a slight increase towards the end of the day, with readings ranging from 70.5% to 78%. The highest reading of 78% was recorded at 21:48:26 and the lowest reading of 70.5% was recorded at 03:18:27. All humidity levels are within the green threshold (below 65%) except for one reading at 21:48:26 which is in the amber zone (between 65-68%). This could be a potential area of concern if it persists over an extended period.

4. Conclusion:

The CO2, temperature and humidity levels were generally within their respective green thresholds throughout the day. However, one reading in the humidity trend was in the amber zone which could potentially indicate a problem area if it continues to increase.

5. Recommendation:

Given that only one humidity reading was above the threshold and it occurred towards the end of the data set, further investigation is needed to confirm whether this is an isolated incident or part of a trend. If it is indeed a trend, steps should be taken to address the cause such as improving ventilation or addressing potential sources of moisture in the room. Regular monitoring and analysis of these sensor readings can help identify any potential issues early on and prevent them from becoming more serious problems.