

One week output inter-unit comparison

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1 Introduction

This document displays the data output from a one week sensor comparison study done at Circor Solutions to track consistency of output data from one BonoloV5 to another. Screenshots of the plots are from the Circor Solutions online dashboard. The site is an indoor factory floor with factory machinery, e.g. reflow ovens and soldering irons that are used during the day. Staff of eight individuals normally occupy the area. The floor area for the room is 12 m x 10 m x 2.6 m.

2 List of materials and resources used

1. Bonolo unit CCSBN0004.
2. Bonolo unit CCSBN0007.
3. Circor solutions dashboard monitor.circor.co.za .

3 Sensor setup



Figure 1: CCSBN0004 left and CCSBN0007 on the right

4 Project setup on the Bonolo V5 units

Sampling period: 1 minute.

Upload method: WIFI.

Upload interval: 60 minutes

5 Results

Raw data for the results is available from the dashboard, downloadable in CSV format. The following graphics display the results as seen on the dashboard web interface.

5.1 PM1, PM2.5 and PM10 comparison

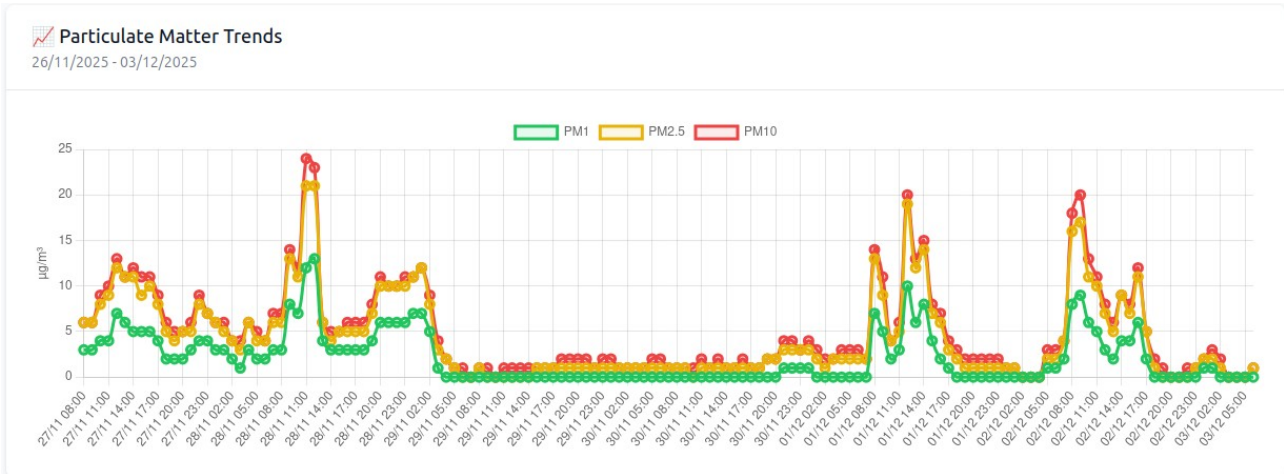


Figure 2: CCSBN0004 - PM1, PM2.5 and PM10



Figure 3: CCSBN0007 - PM1, PM2.5 and PM10

5.2 CO2 comparison

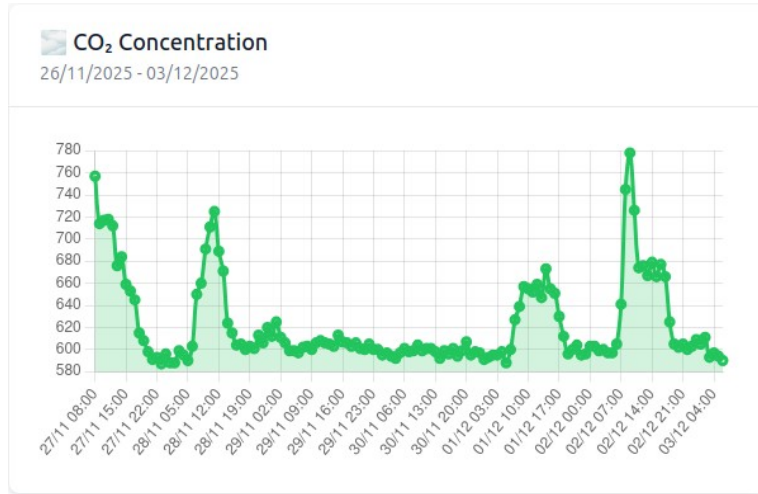


Figure 4: CCSBN0004 - CO₂

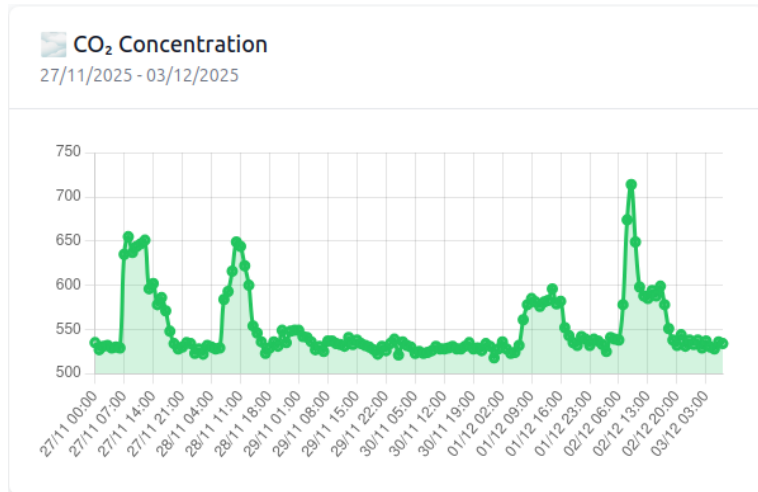


Figure 5: CCSBN0007 - CO₂

5.3 Temperature comparison

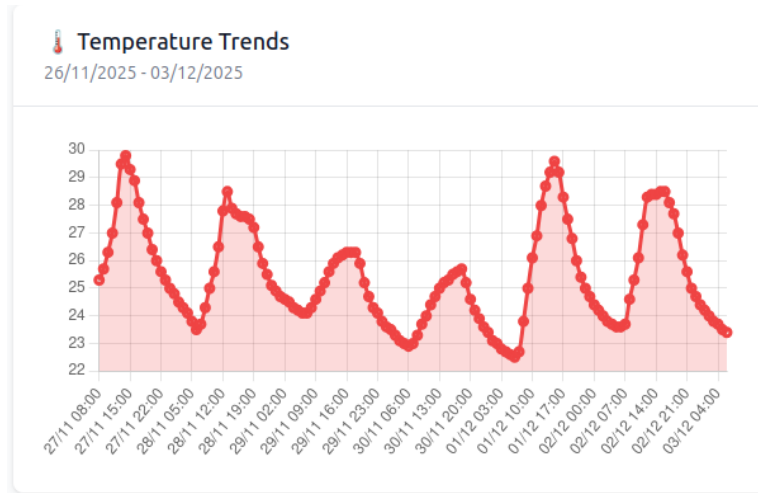


Figure 6: CCSBN0004 - Temperature

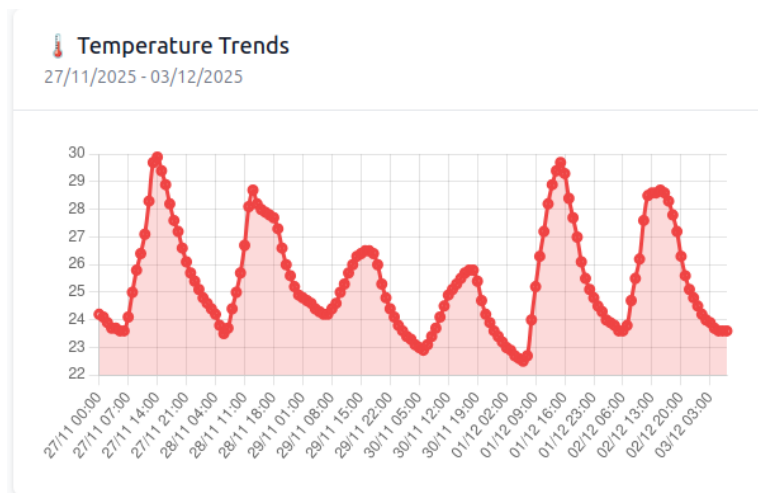


Figure 7: CCSBN0007 - Temperature

5.4 Relative humidity comparison

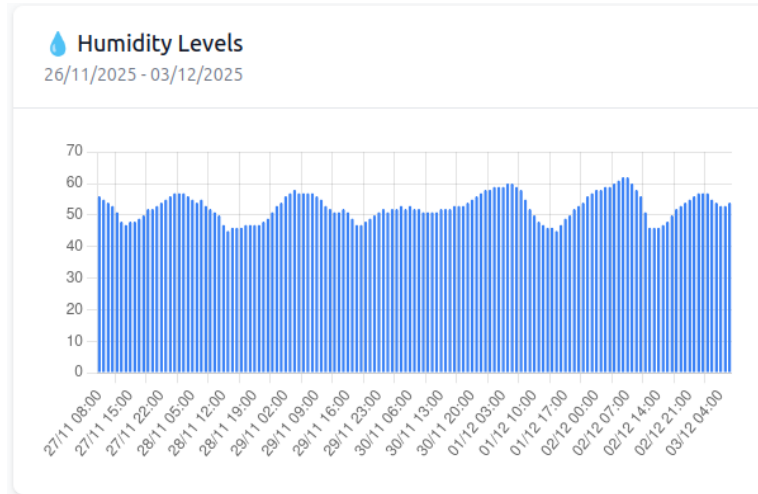


Figure 8: CCSBN0004 – Relative humidity

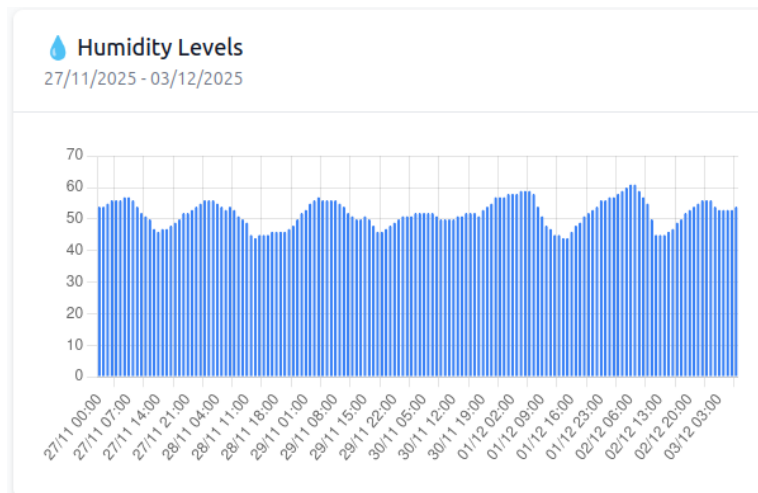


Figure 9: CCSBN0007 – Relative humidity