

Why is the CO₂ (carbon dioxide) value of the MultiSensor-TI less accurate than that of a CO₂ meter?

The integrated sensor is primarily a sensor that monitors ambient air quality and measures various environmental parameters, including temperature, humidity, air pressure, and volatile organic compounds (VOCs). However, it does not directly measure the carbon dioxide (CO₂) content in the air.

However, the integrated sensor can indirectly indicate changes in CO₂ levels by measuring VOCs. When the CO₂ content in the air changes, this often has an impact on the concentration of VOCs, since human activities and processes that release CO₂ usually also emit VOCs. By measuring VOCs, the measurement can indicate the overall quality of the ambient air, as elevated VOC concentrations can indicate poorer air quality.

It is important to note that the MultiSensor does not perform precise CO₂ measurements like specialized CO₂ sensors, but only a calculation or estimate of the value. If you need accurate CO₂ measurements, you should use a dedicated CO₂ sensor designed specifically for this task.

In summary, the MultiSensor does not measure the CO₂ content directly, but indicates changes in the air quality that could indirectly indicate changes in the CO₂ content in the environment.

[Further information on the air quality index can be found in the MultiSensor-TI operating instructions.](#)

Limit ranges and typical CO₂ values

Environment - Description	CO ₂ values (ppm)
Normal value of the outside air	350 - 500
Normal value indoors	< 1.000
Elevated values indoors	1.000 - 2.000
Problematic value	> 2.000