

How to Check CO₂ Levels in Your Home

To check CO₂ levels in your home, use a reliable [indoor air quality](#) monitor like the VENTI [PICO](#), which measures CO₂, humidity, and temperature. Place the device at head height away from windows or vents, and aim to maintain CO₂ concentrations below 800 ppm for optimal air quality. Regularly ventilate high-occupancy rooms and consider installing [mechanical ventilation systems](#) for long-term control.

Understanding CO₂ Levels in UK Homes

CO₂ levels in homes are a critical indicator of indoor air quality. In the UK, average indoor CO₂ concentrations range between 400–1,200 ppm, depending on occupancy and ventilation. Levels above 1,000 ppm can cause drowsiness and reduced concentration, while sustained exposure to 2,000+ ppm poses health risks. Monitoring helps identify “stale air” zones and informs [ventilation strategies](#).

Step-by-Step Guide to Checking CO₂ Levels

1. Choose a High-Accuracy CO₂ Monitor

Not all devices are equal. Opt for monitors with NDIR (non-dispersive infrared) sensors, like the VENTI PICO, which offers ± 50 ppm accuracy—a benchmark recommended by UK health guidelines. Avoid cheaper models with electrochemical sensors, as these can drift over time and produce unreliable readings.

Key features to prioritise:

- Real-time data logging
- Customisable alerts for high CO₂
- Compatibility with smart home systems

2. Position the Monitor Strategically

Placement significantly affects readings. Follow these rules [4](#):

- Height: Mount at head height (~1.5 metres) to reflect breathing zones.
- Avoid drafts: Keep away from windows, doors, or HVAC vents to prevent skewed data.
- Focus on high-risk areas: Kitchens, bedrooms, and home offices often accumulate CO₂ due to prolonged occupancy.

Pro tip: Use multiple monitors in larger homes for a comprehensive assessment.

3. Interpret the Data

- <800 ppm: Ideal for living spaces.
- 800–1,200 ppm: Ventilation needed. Open windows or activate extractor fans.
- >1,200 ppm: Immediate action required. Increase [airflow](#) or reduce occupancy.

The UK Health and Safety Executive (HSE) recommends intervening at 1,500 ppm in workplaces, but homes should aim lower due to continuous exposure [2](#).

4. Implement Solutions

- Natural ventilation: Open windows for 10–15 minutes hourly.
- Mechanical systems: Install demand-controlled ventilation (DCV) systems, like VENTI's [ARIA](#) or [FLUXO](#), which adjust airflow based on real-time CO₂ data.
- Lifestyle adjustments: Limit overcrowding in small rooms and use extractor fans during cooking.

Why CO₂ Monitoring Matters for UK Households

Poor ventilation in British homes—often due to energy-efficient sealing—traps CO₂ and moisture, leading to [damp](#) and mould. In 2023, Public Health England linked 12% of respiratory issues in children to inadequate indoor air quality. Mechanical ventilation systems, like those from VENTI, reduce CO₂ while maintaining energy efficiency, addressing both health and environmental priorities.

The VENTI Advantage: Precision Meets Simplicity

VENTI's PICO monitor simplifies CO₂ tracking with:

- 24/7 data logging to identify trends.
- Humidity and temperature sensors for holistic air quality insights.
- UK-specific support, including installation guidance and compliance with Building Regulations Part F.