

# FRESH AIR FOR YOUR HEALTH



Wöhler CDL 210 CO<sub>2</sub>-Data logger

Assessing indoor air quality



# Wöhler CDL 210 CO<sub>2</sub>-Data logger

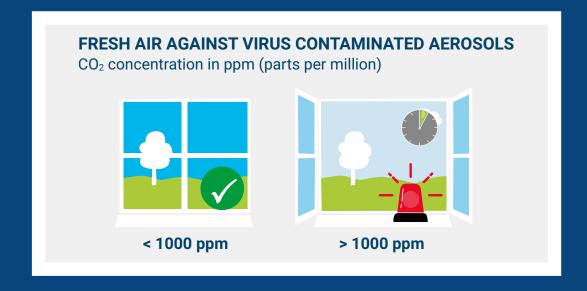
#### Ventilate the right way

Ventilating and heating a building properly is extremely important for health and also saves money. Depending on the weather conditions, dry air enters the room during ventilation. Humid air escapes outside. Dry air can be heated more quickly, which means that heating consumes less energy. In winter, however, ventilation should only be brief so that heat loss is not too high. Air is also exchanged more quickly in cold weather. The colder it is outside, the shorter the ventilation should be (maximum 5 minutes).

#### There are three types of ventilation:

- Impact ventilation Windows should be opened as wide as possible for five to ten minutes
- 2. **Cross ventilation** Opposite facing windows are opened for one to ten minutes so that a draught is created and a complete exchange of air takes place in a short time.
- 3. Tilt ventilation When the window is tilted, a complete air exchange takes one hour. Walls and furniture near the window cool down, allowing moisture in the air to condense on them. The risk of mould is increased. During the heating period, a lot of heat is also transported outside, which increases energy consumption.

Therefore, air the room regularly and at least three times a day if possible. Especially in the morning to remove high humidity and  $CO_2$  concentration from the night and also before going to bed as a preventive measure.















#### CO<sub>2</sub> is an important indicator for indoor air quality

Scientists agree that viruses are largely transmitted by aerosols floating in the air. This is a mixture of gas (usually air) and solid or liquid components, which can also contain viruses. Indoor spaces can therefore quickly become a danger zone if an infected person is present. Effective ventilation provides a remedy by transporting virus-contaminated, "used up" air outside and fresh air inside. Whether the air exchange is ensured by a well-maintained ventilation system or by window ventilation is irrelevant. It is more important to ventilate at the right time. The permanent monitoring of indoor air quality can be done very easily.

An important factor for monitoring indoor air quality is the  $\mathrm{CO_2}$  content. It can be measured and is indicated in ppm (parts per million). Through respiration, living organisms release moisture and  $\mathrm{CO_2}$  into the room air and, if they are ill, also viruses. A high  $\mathrm{CO_2}$  concentration in the air therefore indicates an urgent need for ventilation, because if this value is high, it can be assumed that many aerosols are floating in the air. And this too has now been scientifically proven: The  $\mathrm{CO_2}$  concentration has a considerable influence on human well-being. An increased value leads to concentration problems and a considerable drop in performance. The low cost of monitoring the  $\mathrm{CO_2}$  content in the room air therefore makes a major contribution to your health and well-being.

<sup>\*</sup> see also information from the German Federal Environment Agency and the Robert Koch Institute

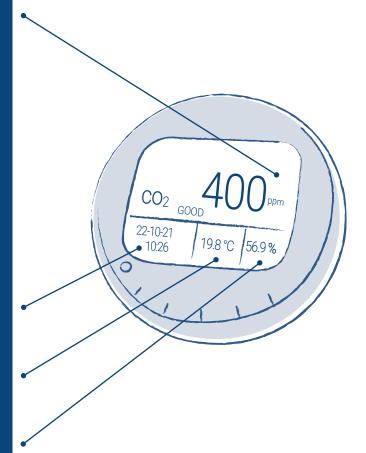
## Product Selection



	Wöhler CDL 210 CO₂-Data logger
Comprehensive assessment of indoor air quality and the ventilation situation as well as problem analysis (discomfort, humidity / mould / concentration problems) through a combined continuous measurement and determination of the $\mathrm{CO}_2$ content / the air temperature / the air humidity	•
Delivery quantity	1
Scope of delivery	
Wöhler CDL 210 CO <sub>2</sub> -Data logger	•
Power supply unit	•
USB data cable	•
PC software	•
Article no.	6648

• = included

CO<sub>2</sub> concentration in ppm (parts per million)



Date & time

Air temperature in °C (or °F)

Relative air humidity in %

### >> Technical Data

#### CO<sub>2</sub>-Measurement

Measurement range:	09,999 ppm
Accuracy:	±50 ppm ±5 % of measured value (02,000 ppm)
Resolution:	1 ppm

#### Orange 1 Orange 2 Orange 2</p

Measurement range:	-1060 °C
Accuracy:	±0.6 °C (±0.9 °F)
Resolution:	0.1 °C

#### Air humidity

Measurement range:	595 % r.h.
Accuracy:	at 1090 % 25 °C: ±3 % r.h. otherwise: ±5 % r.h.
Resolution:	0.1 % r.h.

#### **♥** Power supply

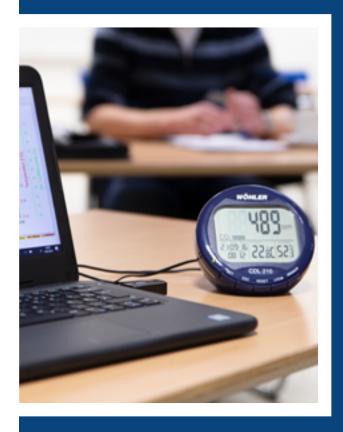
AC power supply unit 5V

#### **X** Application

- Comprehensive assessment of indoor air quality and the ventilation situation as well as problem analysis (discomfort, humidity / mould / concentration problems) through a combined continuous measurement and determination of
  - the CO<sub>2</sub> content
  - the air temperature
  - the air humidity
- Support correct ventilation behaviour with visual and acoustic prompts to ventilate, e.g. in
  - Living rooms
  - Meeting / recreation rooms in commercial and public areas (e.g. schools)

#### Advantages

- ► Comfort display with adjustable limit values and acoustic and visual alarm function
- ▶ Data logger with adjustable log rates
- ▶ The adjustable alarm function reminds you to supply fresh air, thus preventing the spread of viruses (e.g. the coronavirus) in closed rooms
- Continuous data transmission for online measurement and monitoring





Scan the QR code and find out more!

