



Helios CO₂-Monitor

Detect air quality.
Ventilate in time.





Helios CO₂-Monitors as air quality indicators.

In these times of the Coronavirus pandemic, fresh, healthy air is crucial for staying safe in enclosed spaces. With increasing CO₂ concentrations, the amount of aerosols in the room air and thus the risk of viral infection increases – it is high time to ventilate! Maintain control now with the new Helios CO₂-Monitors:

The sensors continuously measure the room air quality and signal when it changes. The five level LED display in traffic light colours immediately shows the current range of the CO₂ concentration. As additional option, an acoustic signal can also be switched on. The measurement range extends from 0 to

3000 ppm (parts per million). A concentration of 1000 ppm is regarded as a critical value in connection with the aerosol problem. At this value, the CO₂-Monitor prompts the user to introduce ventilation measures via the yellow warning LED.

You see – Helios CO₂-Monitors provide a simple option for making the air quality visible. They are therefore suitable for various areas of application. Whether it is class rooms, training rooms, offices, or retail stores – you always have an overview of the room air quality.

CO₂-Monitors are suitable for various applications.

- Schools and classrooms
- Universities and lecture halls
- Child day care centres
- Waiting rooms
- Offices, e.g. open-plan offices or meeting rooms

- Clinics and curative day centres
- Retirement and nursing homes
- Fitness studios and sports centres
- Hotels and restaurants

- Retail
- Private residential
- Public buildings



Your advantages:



At a glance.

The CO₂-Monitor has a traffic status light display with five different LEDs which provide information about the concentration of CO₂ content in the room air in three colours and graduated brightnesses.



Optional with signal tone.

In addition to the traffic light display, an acoustic signal can also be switched on. Thus you are informed that window ventilation is required when the warning levels are reached.



Immediately operational.

The units with power plugs only require a free power socket and are fully operational after one hour at the latest.



Entirely maintenance-free.

Helios CO₂-Monitors are maintenance-free. Even the calibration is fully automated.



Intelligent measurement range.

CO₂ values are measured in the range from 0 to 3000 ppm (parts per million). The room air quality is continuously displayed via the glowing LEDs.

How it works:

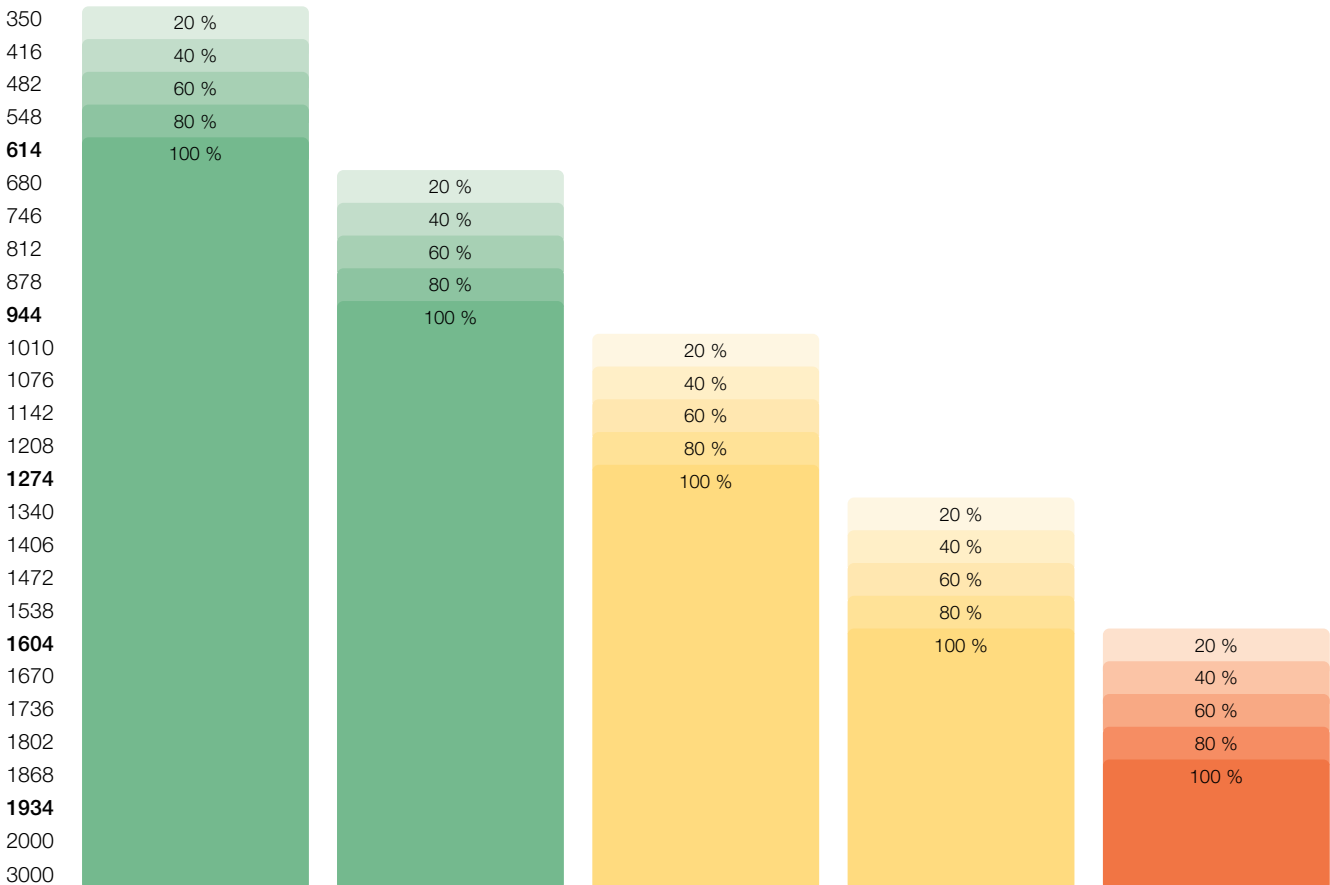
The CO₂ measurement takes place via a NDIR sensor (non-dispersive infrared technology). The measurement range extends from 0 to 3000 ppm (parts per million). The yellow LED lights up at 1000 ppm. This value is also regarded as a critical value in connection with Covid-19.

In accordance with the German standard VDI 6040, the indoor climate in category 2 schools should comply with EN 15251. In this respect, the CO₂ value should not exceed 1000 ppm. Values greater than 1000 ppm and less than or

equal to 2000 ppm are to be rated as hygienically conspicuous. No measures are necessary while the green light is glowing on the Helios CO₂-Monitor. The yellow LEDs indicate that ventilation should take place. If the red LED lights up, the CO₂ values are so high that intensive ventilation is required.

How it works in detail:

CO ₂ content in ppm	LED 1 ● No action required	LED 2 ● Prompt ventilation recommended	LED 3 ● Supply ventilation recommended	LED 4 ● Ventilation necessary	LED 5 ● Intensive ventilation necessary
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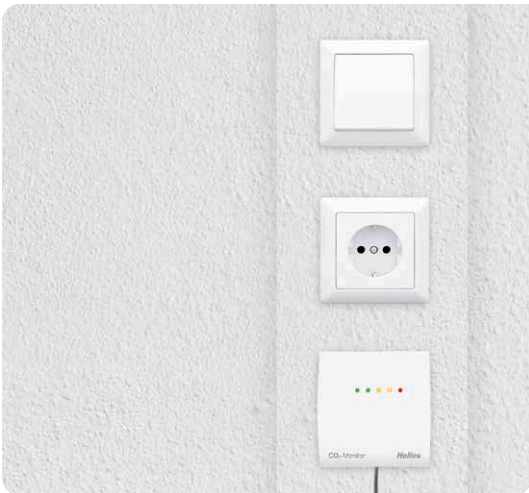


Three versions for maximum comfort:



■ CO2 AP-A

CO2 AP-A is ideal as a mobile solution thanks to the power plug with micro-USB and high-quality stainless steel stand holder. Simply take it into the desired room, plug it in and feel safe.



■ CO2 AP

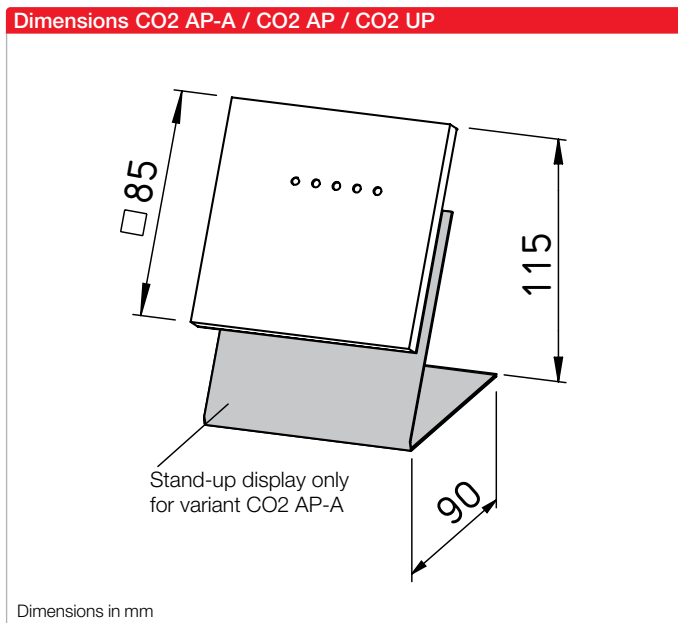
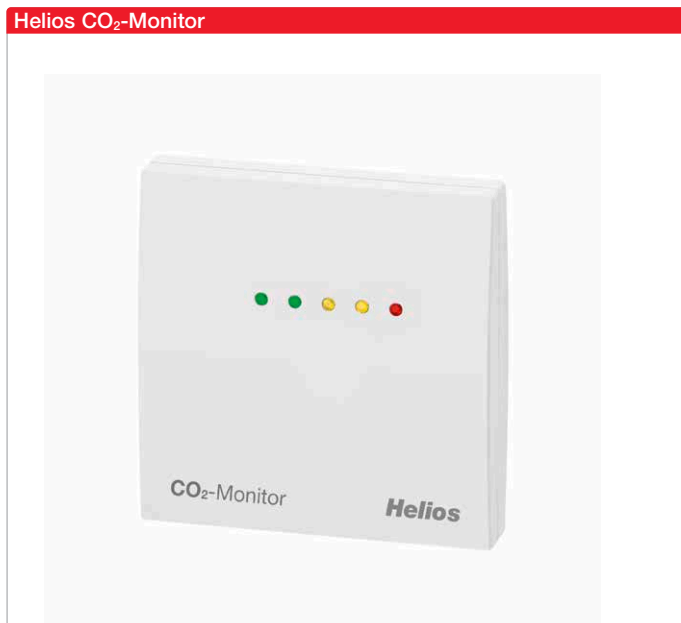
CO2 AP has a power plug and is ideally suited for wall installation.



■ CO2 UP

CO2 UP is provided with a power supply unit (included in delivery) for flush-mounting. The CO₂-Monitor is installed in a flush-mounted box.

Technical data: Helios CO₂-Monitor.



Maintenance-free CO₂-Monitor with traffic light display, incl. power plug with micro-USB or power supply unit, self-calibrating, in elegant plastic casing. For determining the CO₂ content of the room air (0...3000 ppm) in individual rooms, such as class rooms, training and meeting rooms, offices, hotels, retail stores, etc. A energy-saving, needs-based window ventilation is ensured.

Unit variants
Standing unit with stainless steel stand holder (CO2 AP-A), for direct

wall installation (CO2 AP) and for installation in flush-mounted boxes (CO2 UP).

- Casing**
Plastic, material ABS, colour pure white (similar to RAL 9010).
- Sensor**
Optical NDIR sensor (non-dispersive infrared technology) with automatic calibration.
- Air quality**
The measurement transducer converts the measurement variable into a standard signal that is

visually displayed directly via five coloured LEDs (traffic light display). As additional option, an acoustic signal can also be switched on.

Standards
CE conformity, electromagnetic compatibility according to EN 61326, EMC Directive 2014 / 30 / EU, Low-Voltage Directive 2014 / 35 / EU.

Installation
CO2 AP-A: mobile CO₂ measurement unit on stainless steel stand holder. CO2 AP / UP: Wall installation or in flush-mounted box,

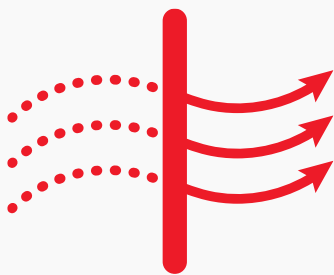
Ø 55 mm, base with 4 holes, for attachment to vertically or horizontally installed flush-mounted boxes for cable entry at rear. With predetermined breaking point for cable entry at top / bottom for surface mounting.

Note: The unit must not be used for safety-related tasks.

Technical data	CO2 AP-A	CO2 AP	CO2 UP
Ref. no.	40109	40107	40108
Power supply	230 V AC (50 – 60 Hz)		24 V AC / DC (+- 10%)
Electrical connection	Power supply unit 230 V / 50 - 60 Hz (included in delivery)		
Measurement range	0...3000 ppm		
Measurement accuracy	typical +- 30 ppm +- 3% of measurement value		
Long-term stability	< 2% in 15 years		
Gas exchange	Diffusion		
Ambient temperature	0...+ 50 °C		
Start-up time	approx. 1 hour		
Response time	< 2 minutes		
Protection class	III (according to EN 60 730)		
Protection category	IP 30 (according to EN 60 529)		
Features	Traffic light status display (five coloured LEDs; see also page 4) to display the CO ₂ concentration, CO2 AP with power plug (connection cable approx. 1.5 m), CO2 UP with flush-mounted power supply unit for mounting in flush-type boxes, CO2 AP-A with stand-up display made of stainless steel and power plug with micro-USB. Optional: an acoustic signal can also be switched on.		

Have you met our new Helios AirPal air purifier?

Helios CO₂-Monitors can be combined with the new Helios AirPal air purifiers for additional infection protection. AirPal filters viruses and minute particles out of the air, while the CO₂-Monitors display the room air quality. AirPal air purifiers are immediately ready for use, they do not require installation or adjustment and they are therefore an ideal immediate measure for quickly ensuring safety in indoor spaces without red tape.



Configure now:
[AirPalSelect.com](https://www.airpalselect.com)

■ Helios AirPal air purifier:

- Floor-standing units in performance classes 300 – 2,200 m³/h. For room sizes up to 180 m².
- Mobile air purifiers in performance classes 100 – 850 m³/h. For room sizes up to 70 m².

■ Our filter technologies:

- AirPal series H with three-level filter concept incl. HEPA 14 remove 99.995 % of all viruses from the room air.
- AirPal series U with UV-C disinfection system eliminates viruses effectively and safely.



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