

## AIR GOOD

Item number: 900701



Device for air quality measurement in closed spaces

### Overview

AIR GOOD controls the air quality in closed spaces, like rooms, classrooms or offices.

Clean air ideally consists of approx. 21% oxygen (O<sub>2</sub>), 78% nitrogen (N<sub>2</sub>), 0.03% carbon dioxide and 0.93% noble gases. In closed rooms, however, other components are also contained, such as volatile organic compounds (VOCs), which mainly come from biological sources (e.g. humans) and electric devices.

The integrated air quality sensor records VOCs, relative humidity, barometric air pressure and the ambient temperature. The condition of the indoor air IAQ (Indoor Air Quality) is determined from all this data. The combination of the four measured values allows a better assessment of the room air than the mere CO<sub>2</sub> measurement.

When the limit value is reached, the buzzer sounds and the light lights up red - it must be ventilated. As soon as the air quality has improved again, the traffic light changes to green and shows that the ventilation process can be ended.

#### Explanation of the display status:

The measured value of the AIR GOOD sensor is recorded in ppm (parts per million), eCO<sub>2</sub> is equivalent to CO<sub>2</sub>.

CO <sub>2</sub>	eCO <sub>2</sub>	IAQ	Light color
< 1 000 ppm	< 1 000 ppm	< 100	green
> 1 000 ppm	> 1 000 ppm	> 100	yellow
> 2 000 ppm	> 2 000 ppm	> 200	red + buzzer

AIR GOOD can be installed anywhere in the room using an optional wall bracket. The integrated battery enables operation in any room and at any time without the need for cabling.

The light can be charged using a standard USB

power supply unit with a micro USB cable (5 volts, at least 1.5 amps).

Optional: The AIR GOOD app also shows the room monitoring on the smartphone.

### Use cases

Air quality has a massive impact on us humans. In schools and workplaces with good air quality, people are generally healthier, more productive and more productive. Rooms must be ventilated regularly for good air quality.

High VOCs cause health problems such as dizziness, headaches and nausea. At the same time, however, they also show the probability of a high virus concentration in the room air.

The humidity in particular is important for a healthy living environment. Too little humidity leads to dry mucous membranes and irritated eyes. This increases the susceptibility to pathogens and leads to a feeling of tiredness. If the humidity is too high, there is a risk of mold growth, which has a negative impact on human health.

- › **Educational institutions** e.g. school (classroom), kindergarten, college, university
- › **Other institutions** e.g. museum, library
- › **Gastronomy** e.g. restaurants, bars
- › **Hotels** e.g. hotel rooms, lobby
- › **Companies** e.g. offices, open plan offices, conference rooms, workshops
- › **Public institutions** e.g. authorities, churches, club houses
- › **Others** e.g. doctor's practice, hospital, retail trade, retirement home, nursing home

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## Technical specifications

### Basics

<b>Supply voltage</b>	4,4 - 5,5 VDC USB
<b>Processor</b>	ARM Cortex-M3 48MHz
<b>Dimensions</b>	160 x 80 x 43mm (without wall bracket)
<b>Battery pack</b>	18650, 3,7 V 2,6 Ah
<b>Protection class</b>	IP20

### Accessories

<b>optional</b>	Micro-USB cable with angled plug
<b>optional</b>	Micro-USB cable with straight plug
<b>optional</b>	USB charger

### Interfaces

<b>Power supply</b>	Micro USB, only charging port
<b>Voltage measurement</b>	› Battery voltage › Supply voltage
<b>Programming</b>	10 pin header, SWD



Fig. Vertical and horizontal mounting

### Other properties

<b>Air quality sensor</b>	› Air quality IAQ (Indoor Air Quality) / eCO <sub>2</sub> (equivalent calculated carbon dioxide) › Temperature: -40 - 85°C › Air pressure: 300 - 1100 hPa › Humidity: 0 - 100%
<b>LEDs</b>	› Green: connection status › Red: charger connected › Red: battery empty › RGB: bad air quality › RGB: moderate air quality › RGB: air quality good
<b>Buzzer</b>	4 kHz
<b>Button</b>	light on/off, BT on/off
<b>Charge controller</b>	1 A charge current



Red: bad, yellow: moderate, green: good