

## Data sheet: CO<sub>2</sub> traffic light DesignHome

The microprocessor-controlled CO<sub>2</sub> measuring device is used to record the CO<sub>2</sub> content (0 to 9,999 ppm), temperature and humidity. The measuring signals are optically represented in the form of a display numerical, as traffic light or as smileie-graphic.

The CO<sub>2</sub> content in air is determined by an optical sensor (NDIR), non-dispersive infrared technology. By using the sensor according to the dual principle, disturbances of the measurement by pollution and aging can be excluded as far as possible, so that a long live time of the device is ensured. Calibration is under normal operating conditions not necessary. Temperature and humidity serve as additional information.

The application of the CO<sub>2</sub> traffic light DesignHome is especially recommended in private rooms, offices, teaching rooms and conference rooms, because the maximum CO<sub>2</sub> air concentration is kept within limits by a controlled ventilation behavior and so the ability to concentrate can be increased. The CO<sub>2</sub> traffic light DesignHome is designed as a wall device for mounting on a flush-mounting box.



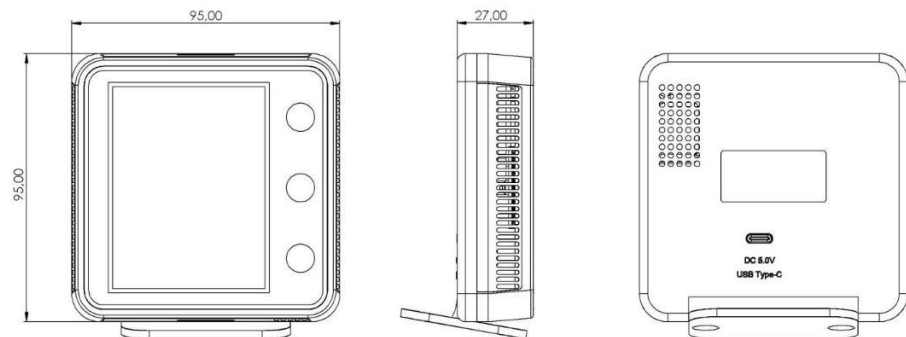
Technical data	CO <sub>2</sub> -Ampel DesignHome, Articel No.: CO2 - A 300
Measuring method CO <sub>2</sub>	Dual Wavelength NDIR, with ABC self-calibration logic (factory setting)
Measuring range CO <sub>2</sub>	0–9.999 ppm
Measuring error CO <sub>2</sub> (25°, 77°F, 3.000ppm)	± 75 ppm or 10% of the reading (the highest value in each case)
Measuring response	< 2 minutes for 90% step size
Measuring intervall	2 sec
Temperature sensitive	0,2 % / °C
Working conditions	0 - 50 °C, 0-95% rel. humidity , non-condensing
Power Supply	5V VDC
Electrical connection	On-site in a flush-mounting box, D 68mm, Minimum depth 35mm
Power usage	1,5 W
Dimensions	95 x 95 x 27 mm
Weight	100 g
Protection category	III according to EN 60730 and IP31 to EN 60 529
Traffic light display CO2 value (factory settings)	
green	< 1.000 ppm
yellow	1.000 to 2.000 ppm
red	> 2.000 ppm
Technical modification reserved	

### Initial start-up

After connecting the voltage, the warm-up time starts 150s (shown on display). During initial start-up (or when not used for longer than one month), the initializing time time is 24 hours, after which the sensor operates stably. The normal initializing time time is 5 minutes.



### Dimensions

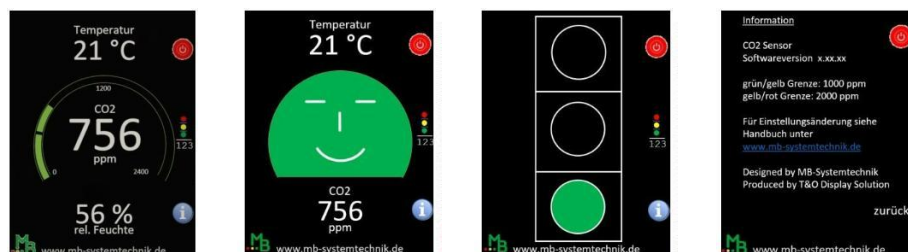


### Instruction manual CO<sub>2</sub> traffic light DesignHome

The upper key can be used to switch the sensor on or off.

By pressing the middle button you can choose between three display modes (values, smileie and traffic light).

The lower key brings you to the info menu



## Instructions

1. To protect the infrared CO<sub>2</sub> sensor, please do not shake or hit it.
2. When using the first time or after a long period of unuse, the CO<sub>2</sub> sensor must be turned on continuously for at least 2 days for self-calibration
3. The sensor will self-calibrate every 14 days when it reaches the value of 400ppm (e.g. due to extensive ventilation or non-use of the room installed).

## CO<sub>2</sub> values



CO<sub>2</sub> - air concentration < 2.000 ppm  
Poor air quality  
Please ensure air exchange (ventilation)



CO<sub>2</sub> - air concentration 1,000 to 2,000 ppm  
There is a medium air quality



CO<sub>2</sub> - air concentration < 1,000 ppm  
No significant load

## Setting the threshold values

In the Info menu, press the middle key and the lower key simultaneously for at least 3 seconds and you will switch to the settings menu.

- The upper key is used to select the setting of the green/yellow threshold value
- Press the middle button to return to the previous display (traffic light or numerical display)
- Press the lower key to select the yellow/red threshold setting



## Green/yellow or yellow/red adjust in the Settings menu:

- Press the upper button to increase the threshold value by 1 ppm at a time
- Press the lower key to decrease the threshold value by 1 ppm at a time
- Press the middle key is canceling the setting mode

If you press the setting keys for longer than 1 second, the threshold value changes in fast forward mode.



- In the subsequent menu, the previously set threshold value is permanently saved by pressing the upper key.
- The middle key has no function in this menu
- The lower key cancels the setting, i.e. the changed setting is discarded.



For more information, please visit our website:

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