## AirQS-100 | Air quality sensor - carbon dioxide (CO<sub>2</sub>)



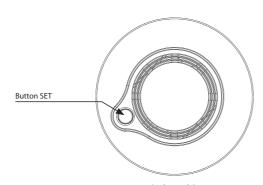
Technical parameters	AirQS-100S	AirQS-100L	AirQS-100NB
Power supply			
External power supply:	110 - 240 V AC		
Input			
Measurement of CO <sub>2</sub> concentration:	YES		
Sensitivity:	300 - 5 000 ppm		
Accuracy:	5% (0 - 180 ppm)		
Temperature measuring:	built-in sensor		
Sensitivity:	-25 70 °C		
Accuracy:	±3°C		
Humidity measuring:	built-in sensor		
Sensitivity:	0 90 % RH		
Accuracy:	± 4 %		
Light intensity measurement:	built-in sensor		
Range:	0.045 - 188 000 Lx		
Setting			
Alarm Detection:	message to the server		
Indication			
Red / green LED:	See manual		
Detection area:	max. 40 m³		
Recommended installation height:	max. 4 m		
Communication			
Protocol:	Sigfox	LoRa	NB-IoT
Transmitter frequency:	RCZ1 868 MHz	868 MHz	LTE Cat NB1*
Range in open space:	Approx. 50 km**	Approx. 10 km**	Approx. 30 km**
Transmission power (max.):	25 mW / 14 dBm	25 mW / 14 dBm	200 mW / 23 dBm
Other parameters			
Working temperature:	0+40 °C		
Storage temperature:	-30…+70 ℃		
Operation position:	Horizontal (ceiling) / Vertical (Wall)		
Mounting:	screws		
Protection degree:	IP20		
Color:	white		
Dimension:	Ø 120 x 36 mm		
Weight:	185 g		

<sup>\*</sup> Multiple frequency bands of B1 / B3 / B5 / B8 / B20 / B28

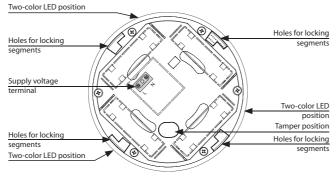
# • AirQS-100 - monitors the CO<sub>2</sub> content of the room and also measures the actual temperature, humidity and light intensity in the room.

- Anti-sabotage: If access to the device is unauthorized, a message is immediately sent to the server.
- Thanks to the wireless solution and Sigfox / LoRa / NB-IoT communication, it can communicate instantly to your chosen location and be operated immediately.
- Data is sent to the server from which it can be subsequently displayed as a smartphone, application, or Cloud notification.
- Power supply 110-240 V AC.

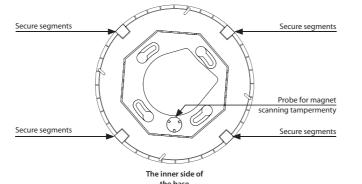
#### **Device description**



The front of the detector



the detector



## AirQS-100 | Air quality sensor - carbon dioxide (CO<sub>2</sub>)

#### Function

The detector detects the carbon dioxide (CO<sub>2</sub>) content in confined spaces by means of a sensor. Sending a message to the server alerts you to the need air the space

#### Indications and states of the detector

After the power supply is connected, the detector sends an introductory message containing the measured values of temperature, light intensity, humidity, CO<sub>2</sub> level and firmware version of the device.

- Sends a data message about the measured values and the status of the detector every 10 minutes.
- Indication of measured CO<sub>2</sub> concentration
- the green LED blinks briefly the measured values are OK.
- Red LED blinks briefly CO<sub>2</sub> concentration is higher than 1500 ppm.
- Air quality is undesirable. It is necessary to air the room.
- Supply voltage indication
- The green LED is lit under the button.
- Removed from base:
- sending a message to the server.
- every 2 seconds the red LED on the detector blinks.

#### Location

### Appropriate location

- Carbon dioxide is heavier than air. The best location for determining the average  ${\rm CO_2}$  concentration is about 1.6 m above the floor.
- The detector should be placed in the bedrooms and rooms where you regularly spend time (offices, classrooms ...).

34 35

<sup>\*\*</sup> Depending on network coverage