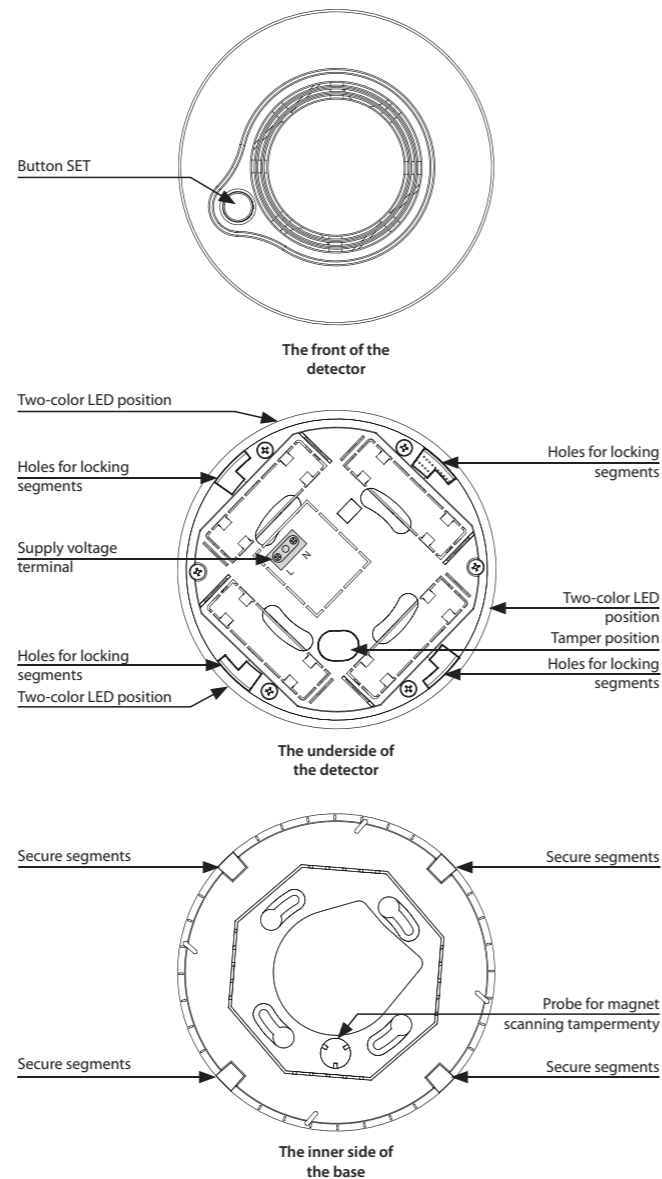- AirQS-100 - monitors the CO$_2$ content of the room and also measures the actual temperature, humidity and light intensity in the room.
- Anti-sabotage: If access to the device is unauthorized, a message is immediately sent to the server.
- Thanks to the wireless solution and Sigfox / LoRa / NB-IoT 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.

Technical parameters

Technical parameters	AirQS-100S	AirQS-100L	AirQS-100NB
Power supply			
External power supply:	110 - 240 V AC		
Input			
Measurement of CO$_2$ 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 m^3		
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 °C		
Operation position:	Horizontal (ceiling) / Vertical (Wall)		
Mounting:	screws		
Protection degree:	IP20		
Color:	white		
Dimension:	Ø 120 x 36 mm		
Weight:	185 g		

* Multiple frequency bands of B1 / B3 / B5 / B8 / B20 / B28
** Depending on network coverage

Device description

Button SET

The front of the detector

Two-color LED position

Holes for locking segments

Supply voltage terminal

Holes for locking segments
Two-color LED position

Holes for locking segments

Holes for locking segments

Two-color LED position
Tamper position

Holes for locking segments

The underside of the detector

Secure segments

Secure segments

Secure segments

Secure segments

Probe for magnet scanning tampermenty

The inner side of the base

Function

The detector detects the carbon dioxide (CO$_2$) 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$_2$ 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$_2$ concentration
  - the green LED blinks briefly - the measured values are OK.
  - Red LED blinks briefly - CO$_2$ 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 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 ...).