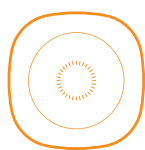




## Air Quality Sensor

### Wireless monitoring of indoor air quality

Since most of today's people spend the majority of their time indoors, the quality of indoor air is critical to human health, work performance, and comfort. By monitoring the levels of volatile organic compounds (VOCs), the wireless, battery-driven Air Quality Sensor will enable your customers to monitor indoor air quality and ensure that the air inside a room is clean and healthy.



- **Continuous monitoring of VOC levels**
- **Accurate humidity, temperature and air quality reporting**
- **Easy mounting and installation**

### Supervise VOC levels

Unlike outdoor air, indoor air is recycled continuously, increasing the concentration of compounds. VOCs are organic chemicals in indoor air coming from various different sources, including paint, building materials, glues, furnishings, tobacco smoking, as well as people and their activities. Some VOCs can have short- and long-term negative effects on health. The wireless Air Quality Sensor detects the TVOC, which refers to the total concentration of VOCs present simultaneously in the air. This gives your customers an opportunity to continuously monitor VOCs in order to prevent negative health effects. See the table below for recommendations about the TVOC level. Moreover, the sensor features long range, and accurate temperature and humidity reporting.

	Level	Hygienic rating	Recommendation	Exposure limit	TVOC (ppb)
5	Unhealthy	Situation not acceptable	Use only if unavoidable / intense ventilation necessary	Hours	2200 - 5500
4	Poor	Major objections	Intensified ventilation / airing necessary Search for sources	< 1 month	660 - 2200
3	Moderate	Some objections	Intensified ventilation / airing recommended Search for sources	< 12 months	220 - 660
2	Good	No relevant objections	Ventilation / airing recommended	No limit	65 - 220
1	Excellent	No objections	Target value	No limit	0 - 65



## Air Quality Sensor - Technical specifications

Model number: AQSZB-110

### General

Dimensions (W x H)	70 x 70 x 21 mm
Colour	White
Power supply	Battery: 2 x AA, exchangeable Battery life: 2 years, reporting every 5 minutes Resolution: 0.1 Volt
Radio	Sensitivity: -97 dBm Output power: up to +7 dBm
Environment	Operation temperature 0 to +50°C IP class: IP20

### Functions

VOC sensor	Range: 0 to 60000 ppb Resolution: 1 - 32 ppb Reporting: configurable
Temperature sensor	Range: 0 to +50°C Resolution: 0.1°C (accuracy typical $\pm 0.2^\circ\text{C}$ ) Sample time: 30 s Reporting: configurable
Humidity sensor	Range: 0 to 100% RH Resolution: 1% RH (accuracy typical 2%, 20-80% RH)

### Communication

Wireless protocol	Zigbee Home Automation Zigbee end-device
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### Certifications

Conforming to CE, RoHS and REACH directives