WISE IAQ

Air quality sensor - Indoor Air Quality

QUICK FACTS

○ Air quality sensor WISE IAQ is available in three variants:

- WISE IAQ Multi measures: VOC, CO_2, RH and temperature.
- WISE IAQ CO_2 measures: CO_2, RH and temperature.
- WISE IAQ VOC measures: VOC, RH and temperature.

Technical description

Design

WISE IAQ is a sensor for wall mounting with integrated radio transmitter that measures temperature and air quality in the room. The unit communicates wirelessly and is powered by 24V AC/DC. Units in Swegon's indoor climate system WISE work both as a transmitter and receiver and can also be used to boost/repeat the system's radio communications.

The sensor is available in 3 variants:

- WISE IAQ Multi: measures VOC, CO_2, RH and temperature.
- WISE IAQ CO2: measures CO_2, RH and temperature.
- WISE IAQ VOC: measures VOC, RH and temperature.

Materials and surface treatment

The front-piece is made of PC and the back-piece is made of PP.

The front-piece is finished in white NCS S1002-Y and the back-piece is finished in grey NCS S5500-N.

Installation

Ideally WISE IAQ is mounted between 1.2 to 1.8 above the floor, close to a door or middle of the wall, see figure 1.

The sensor should not be exposed to sunlight or draught.

Commissioning

Use TuneWISE for commissioning. Commissioning must be performed by qualified and trained WISE service engineers.

Maintenance

If necessary, use a dry cloth when cleaning. Never use water, detergent, cleaning solvent or a vacuum cleaner.

Environment

The Building Materials Declaration is available from www.swegon.com.

Technical data

Power supply:	24 V AC ±10% 50-60 Hz, 15-30 V DC
Max. power consumption:	2 VA
Glass fuse:	250V 0.5A Time Lag (Slo-Blo)
Cable rating, connector:	Max. 1.5 mm ^{2}, push-in - spring force connection
Frequency band:	2.45 GHz IMS band (2400--2483 MHz)
Output (ERP):	50 mW
Range of measurement	
Temperature:	0 – 50°C ± 0.5°C
RH:	20 – 80 rH% +3%,
	0 – 100 rH% +5%
VOC:	450 – 2000 ppm
CO_2:	400 – 2000 ppm
IP class:	IP20
Ambient temperature	
Operation:	0 – + 55°C
Storage:	-40 – +80°C
RH:	10 – 95% non-condensing

1,2-1,8 m
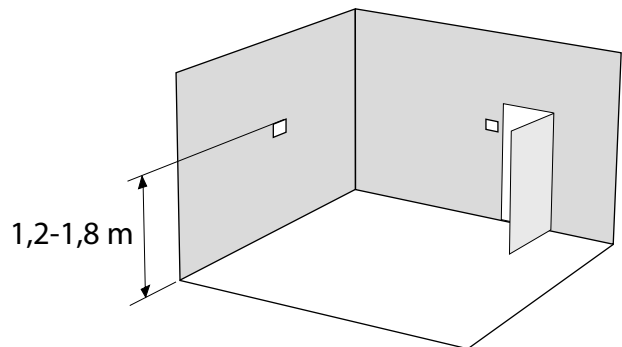
Figure 1. Placement of WISE IAQ.

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Dimensions and weights
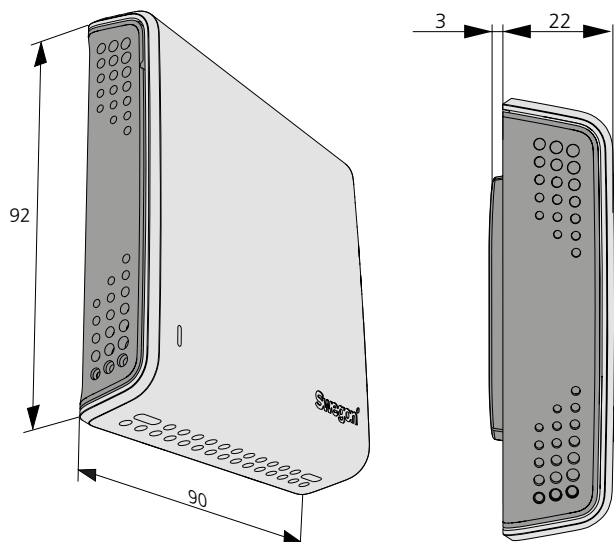
Figure 2. Dimensions, IAQ.

Weight (kg)
0.095

Ordering key

Product

Air quality sensor	WISE IAQ	a	-bbb
Version:			
Variant: Multi, CO2, VOC			

Specification text

Example of a specification text according to VVS AMA. **UBA.23** Meter with combined functions

Swegon's air quality sensor of the type WISE IQA with the following functions:

- Built-in communication unit for communication in Swegon WISE radio network.
- Designed for wall mounting, height from the floor between 1.2-1.8 m.
- The sensor is available in 3 variants:
  - WISE IAQ Multi: Contains sensors for temperature, relative humidity, VOC and CO_2.
  - WISE IAQ CO_2: Contains sensors for temperature, relative humidity and CO_2.
  - WISE IAQ VOC: Contains sensors for temperature, relative humidity and VOC.

Specification:

- Temperature 0-50° ±0.5°
- RH   20-80 rH% ±3%
          0-100 rH% ±5%
- VOC 450-2000 ppm (correlated to CO_2)
- CO_2 400-2000 ppm

Type:	WISE IAQ a VOC	xx items
	WISE IAQ a CO_2	xx items
	WISE IAQ a Multi	xx items