

WISE IAQ

Air quality sensor - Indoor Air Quality



QUICK FACTS

- Air quality sensor WISE IAQ is available in two variants:
 - WISE IAQ Multi that measures VOC, CO₂, RH and temperature.
 - WISE IAQ Multi OCS that measures VOC, CO₂, RH, temperature and also detects occupancy.

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 2 variants:

- WISE IAQ Multi that measures VOC, CO₂, RH and temperature.
- WISE IAQ Multi OCS that measures VOC, CO₂, RH, temperature and also detects occupancy.

Materials and surface treatment

- Front-piece: PC, white NCS S1002-Y.
- Back-piece: PP, 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 $\pm 10\%$ 50-60 Hz, 15-30 V DC
Max. power consumption:	2 VA
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	
Occupancy:	$\pm 60^\circ$ (120°), distance up to 8 m
Temperature:	0 – 50°C $\pm 0.5^\circ\text{C}$
RH:	20 – 80% $\pm 3\%$ 0 – 100% $\pm 5\%$
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)

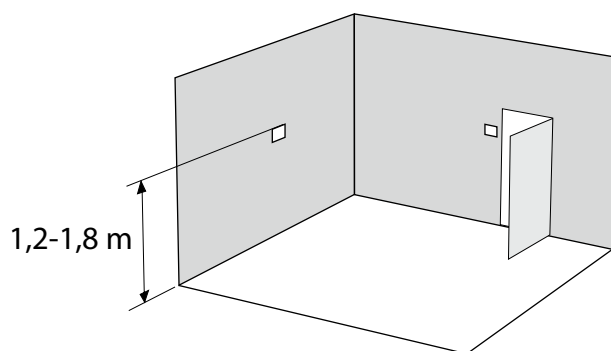


Figure 1. Placement of WISE IAQ.

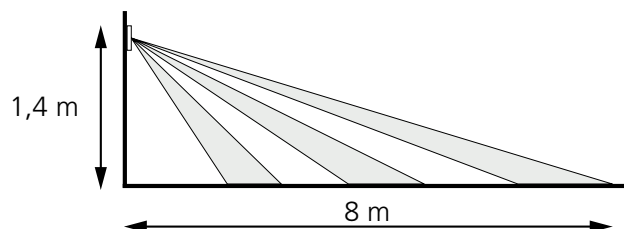


Figure 2. Detection range.

Dimensions and weights

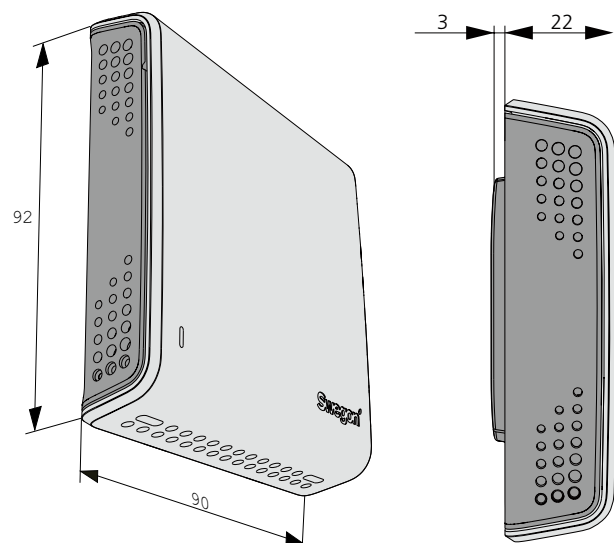


Figure 3. Dimensions, WISE IAQ.

Weight (kg)
0.095

Ordering key

Product

Air quality sensor	WISE IAQ	bbb	b
Variant:	Multi, Multi OCS		
Version:			

Specification text

Example of a specification text according to VVS AMA.

UBA.23 Meter with combined functions, for installation in rooms

Make: Swegon

Type: WISE IAQ

Swegon's air quality sensor of the type WISE IAQ 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 2 variants:
 - WISE IAQ Multi: Contains sensors for VOC, CO₂, RH and temperature.
 - WISE IAQ Multi OCS: Contains sensors for VOC, CO₂, RH and temperature as well as a sensor for occupancy detection.

Specification

Range of measurement

Occupancy:	±60° (120°), distance up to 8 m
Temperature:	0-50° ±0.5°
RH:	20-80% ±3% 0-100% ±5%
VOC:	450-2000 ppm (correlated to CO ₂)
CO ₂ :	400-2000 ppm
Power supply:	24 V AC
IP class:	IP20

Type:	WISE IAQ Multi b	xx items
	WISE IAQ Multi OCS b	xx items