

## Air Multi-Sensor SK25-LMS KNX sensor / controller



Article description	Article number
SK25-LMS	30808000

### Device Description

The SK25-LMK measures the concentrations of fine particulate matter in the PM1, PM2.5 and PM10 size classes, thereby providing an indication of the current level of particulate matter in the indoor air.

In addition to measuring particulate matter, the device also measures CO<sub>2</sub> concentration, volatile organic compounds (VOCs), temperature and relative humidity. These values support a comprehensive assessment of the indoor environment and provide an indication of ventilation requirements, potential sources of pollutants and thermal comfort.

### Applications

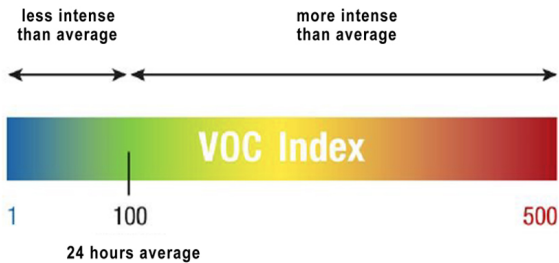
- Monitoring indoor air quality in offices, schools, nurseries and homes, particularly for those with allergies or asthma.
- Optimisation of ventilation systems in buildings and smart home systems.
- Assessment of air quality in production or workshop areas, e.g. during grinding, sawing or printing processes.
- Identification of sources of health hazards (e.g. printers, ovens, cooking processes).
- Assessment of pollution from candles, cooking, smoking and wood-burning stoves.

## Technical Data

<b>SK25-LMS</b>	
Supply voltage	KNX 21 .. 32V DC / 10mA AUX 24 .. 32V DC / 10mA
Operation- / Storage temperature	-20 .. +60°C / -25 .. +80°C
Ambient humidity	0 .. 95% non-condensing
Dimensions	see drawing
ETS application	Arc_S8.knxprod / S8-UNI
Protection class	IP20
<b>Air temperature</b>	
Measuring range	-20 .. +60°C
Resolution	± 0,01°C
Accuracy	± 0,2°C ( 5..60°C and 20..80%rH ), else ± 0,4°C
<b>Air humidity</b>	
Measuring range	0 .. 95%rH
Resolution	0,01%
Accuracy	± 2%rH ( 20..80%rH and 5..60°C ), else ± 4%
<b>VOC</b>	
Measuring range	1 .. 500 VOC-Index-Skala
<b>Fine dust particles</b>	
Measuring range	0 ~ 5.000 µg/m <sup>3</sup>
Resolution	1 µg/m <sup>3</sup>
Accuracy	
PM1.0 / PM2.5	0 ~ 100 µg/m <sup>3</sup> ±10 µg/m <sup>3</sup>
	101 ~ 500 µg/m <sup>3</sup> ±10 % reading
PM10	0 ~ 100 µg/m <sup>3</sup> ±25 µg/m <sup>3</sup>
	101 ~ 500 µg/m <sup>3</sup> ±25 % reading
<b>CO2</b>	
Measuring range	400 .. 5000 ppm
Resolution	± 0,01 ppm
Accuracy	± ( 100ppm + 10% reading @ 10-40°C )

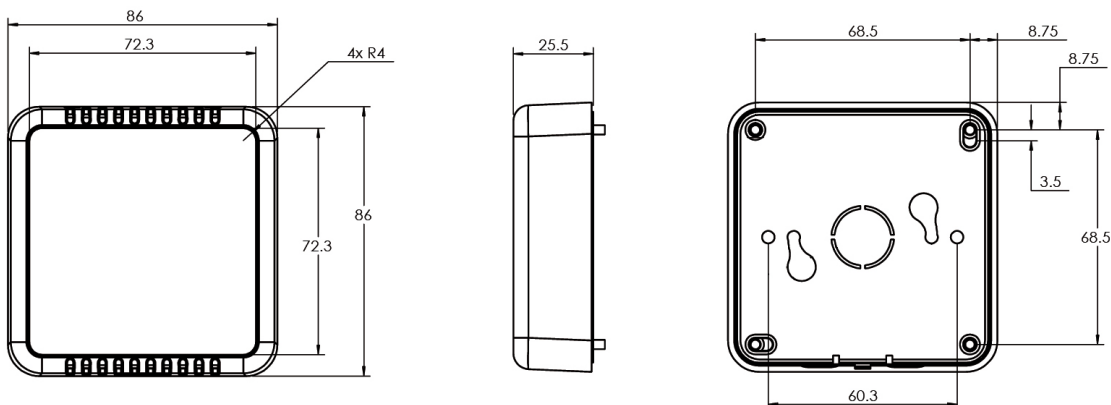
## Information on the VOC value

The gas index algorithm used by Sensirion automatically adjusts its output to any indoor environment and maps all VOC events to a VOC index scale ranging from 1 to 500 VOC index points (see figure).

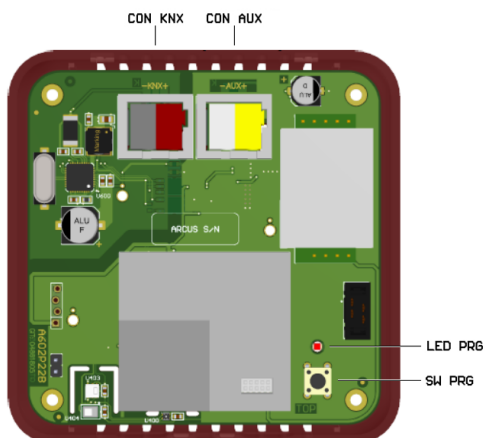


The value 100 refers to the average indoor gas composition over the past 24 hours. While values between 100 and 500 indicate a deterioration, values between 1 and 100 inform about improvement of the air quality. To ensure that the 24-hour average value does not swing up, a regular fresh air event (shock ventilation) is indispensable.

## Dimensions



## Inside view



## In Case of Bus Voltage Recurrence

---

All changes made via the KNX bus are retained if the device has been parameterized accordingly. The measurement and controller values start with their current values ( for PI controllers with an integral component of 0 ). The ETS parameter settings are retained.

## Discharge Program and Reset Sensor

---

To delete the programming ( project planning ) or to reset the module to the delivery status, it must be disconnected from the power supply ( disconnect the KNX bus voltage ). Now press and hold the programming button while reconnecting the KNX bus voltage and wait until the programming LED lights up ( approx. 1-2 seconds ). Now you can release the programming button again and the module is ready for a new configuration.

If you release the programming button too early, repeat the procedure.

## Imprint

---

Editor: Arcus-EDS GmbH, Rigaer Str. 88, 10247 Berlin

Responsible for the content: Hjalmar Hevers, Sascha Bergmann

Reprint, also in part, only permitted with the approval of Arcus-EDS GmbH.

All information without guarantee, technical changes and price changes reserved.

## Liability

The selection of the devices and the determination of the suitability of the devices for a certain intended use are only in the buyer's responsibility. For this there is none liability or warranty assumed. The information in the catalogs and data sheets is not an assurance of special properties, but result from experience and measurements. Liability for damage caused by incorrect operation/project planning or malfunctions of the devices is excluded. Rather, the operator/projector must ensure that incorrect operation, misconceptions and malfunctions cannot cause any further damage.

## Safety regulations

Danger! Installation and assembly of electrical devices may only be carried out by an electrical specialist. Compliance with the corresponding safety regulations of the VDE, TÜV and the responsible Energy supply companies must be ensured by the buyer/operator of the system. No guarantee is assumed for defects and damage caused by improper use of the devices or by not observing the operating instructions.

## Warranty

We provide warranty within the scope of the legal provisions. In the event of a malfunction, please contact us and send the device with an error description Our company address mentioned below.

---

## Manufacturer



Arcus-EDS GmbH  
Rigaer Str. 88  
10247 Berlin

## Disposal



The symbol of the crossed -out garbage bin on the device or the packaging means that the product at the end of his service life may not be disposed of with other general waste.

## Registered trademarks



The CE sign is a free traffic sign that turns exclusively to the authority and none Assurance of properties.



Registered trademark of the Konnex Association