

# Sensorbee Air Quality Front Sensor Module

The Front module have multiple sensors built in. A high performance particle sensor capable of measuring particles from 0.1uM to 10 uM in 7 bins. There are an option to upgrade using a software licence to add a ambient noise sensor. The front module are used in Sensorbee Air Pro products.



## Product specification Module SKU SB3516

**Dimensions** 

61 x 56 x 20 mm

Weight

70 gram

**Material** 

Polyamide

**Operating Temperature** 

-10 °C to +60 °C

**Operating Humidity** 

0 to 95 %RH

**Particle Sensor** 

**Type** 

Optical particle counter

**Mass Concentration Range** 

Pierra 7100

Mass size Range

7 Binning output PC0.1-PC10

Particle Count (PC) resolution

1#/Liter

Particle Count (PC) accuracy

±10 %

Sample Flow Rate

0.11PM

**Temperature Sensor** 

Range and Accuracy

-40°C to 60°C, ± 0.3°C

**Humidity Sensor** 

**Range and Accuracy** 

0...100 %RH, ±3 %RH

**VOC Sensor Range** 

0 to 1,000 ppm (VOC Index 0-500)

**NOX Sensor Range** 

0-10,000 ppb (NOX Index 0-500)

**Pressure Sensor** 

300 ... 1250 hPa

**Accuracy** 

±0.50 hPa

**Module Operational Life** 

24 months

Noise Meter(extra license required)

Range

55-100 dBA

Typical accuracy

±4 dBA

Frequency range

20 - 12k Hz



## Sensorbee **Ambient Noise** add-on License



Introducing our ambient noise license, specially designed for use with Sensorbee Air Pro and Sensorbee Air Lite units. The license enable you to enjoy uninterrupted Ambient noise service for the full lifespan of your base unit, even if sensor modules are exchanged.

## **Product specification Module SKU SB1101**

The Sensorbee Ambient noise enhancer is an innovative software upgrade designed to enable your Sensorbee Air Quality Sensors to also measure noise levels in your environment. Built with advanced dBA noise calculation technology, our add-on license allows your existing Sensorbee units to capture, analyze, and report noise pollution data in real-time, along with the air quality metrics.

Our add-on software license integrates seamlessly with your current Sensorbee Air Quality Sensors, turning them into comprehensive air and noise pollution monitors. The license are valid for a base unit over the full use, even if sensor modules are being exchanged during service life.

Our license tokens can be braght and installed in three ways. Firstly, you can order the base unit together with a noise license, and the license will be at

Alternatively, you can enable the license through the Sensorbee cloud service or receive a licence token generated specifically for your base unit and install the token to the device using a terminal.

The accuracy of the ambient noise sensor are determined by each product. for more information look at Sensorbee Pro front module as well as Sensorbee Lite product specifications.



## Sensorbee CO2 Gas Module



The CO2 gas module has a solid state sensor that detects CO2 concentration.

The CO2 gas modules are pre-calibrated and easy exchangeable.

Temperature and humidity compensation by algorithm.





## Product specification Type SKU SB3552

## **Gas Module Dimensions**

58 x 21 x 22 mm

Weight

20 gram

**Enclosure** 

Polyamide

**Operating Temperature** 

-10°C to +60°C

**Operating Humidity** 

0 to 95 %RH

**Module Sensor CO2** 

Sensor type

Photoacoustic sensor technology

**CO2 Measurement Range** 

0 ppm - 40′000 ppm

CO2 Accuracy

 $\pm (40 ppm + 5 \%)$ 

**Module Operational Life** 

> 3 years



## Sensorbee NO2 Gas Module



The NO2 gas module has a built-in electrochemical sensor that detects NO2 concentration.

The gas modules are pre-calibrated and easy exchangeable.

Temperature and humidity compensation by algorithm.





## Product specification Type SKU SB3532

## **Gas Module Dimensions**

58 x 21 x 22 mm

Weight

20 gram

**Enclosure** 

Polyamide

**Operating Temperature** 

-20°C to +40°C

**Operating Humidity** 

15% to 85 %RH

**Gas Sensor** 

NO2

**Type** 

Electrochemical

**Measurement Range** 

0-5000 ppb

**Typical Accuracy** 

±5ppb

**Module Operational Life** 



## Sensorbee NO Gas Module



The NO gas module has a built-in electrochemical sensor that detects NO concentration.

The gas modules are pre-calibrated and easy exchangeable.

Temperature and humidity compensation by algorithm.





## Product specification Type SKU SB3532

## **Gas Module Dimensions**

58 x 21 x 22 mm

Weight

20 gram

**Enclosure** 

Polyamide

**Operating Temperature** 

-20°C to +40°C

**Operating Humidity** 

15% to 85 %RH

**Gas Sensor** 

NO

**Type** 

Electrochemical

**Measurement Range** 

0-5000 ppb

**Typical Accuracy** 

±5ppb

**Module Operational Life** 



## Sensorbee CO Gas Module



The CO gas module has a built-in electrochemical sensor that detects CO concentration.

The CO gas modules are pre-calibrated and easy exchangeable.

Temperature and humidity compensation by algorithm.





## Product specification Type SKU SB3543

## **Gas Module Dimensions**

58 x 21 x 22 mm

Weight

20 gram

**Enclosure** 

Polyamide

**Operating Temperature** 

-30°C to +40°C

**Operating Humidity** 

15 to 85 %RH

**Type** 

Electrochemical

**Measurement Range** 

0-12000 ppb

**Typical Accuracy** 

±0.08 ppm

**Module Operational Life** 



## Sensorbee O3 Gas Module



The Ozone gas module has a built-in electrochemical sensor that detects O3 concentration.

The gas modules are pre-calibrated and easy exchangeable.

Temperature and humidity compensation by algorithm.





## Product specification Type SKU SB3534

## **Gas Module Dimensions**

58 x 21 x 22 mm

Weight

20 gram

**Enclosure** 

Polyamide

**Operating Temperature** 

-20°C to +40°C

**Operating Humidity** 

15% to 85 %RH

**Type** 

Electrochemical Ozone sensor

**O3 Measurement Range** 

0-2000 ppb

**Typical Accuracy** 

±5ppb

**Module Operational Life** 



## Sensorbee SO2 Gas Module



The SO2 gas module has a built-in electrochemical sensor that detects SO2 concentration.

The gas modules are pre-calibrated and easy exchangeable.

Temperature and humidity compensation by algorithm.





## Product specification Type SKU SB3542

**Gas Module Dimensions** 

58 x 21 x 22 mm

Weight

20 gram

**Enclosure** 

Polyamide

**Operating Temperature** 

-20°C to +40°C

**Operating Humidity** 

15% to 85 %RH

**Gas Sensor** 

SO2

**Type** 

Electrochemical

**Measurement Range** 

0-10000 ppb

**Typical Accuracy** 

±15ppb

**Module Operational Life** 



## Sensorbee External ultrasonic Anemometer



It measures both wind speed and wind direction. It is an ultrasonic anemometer.

The unit can be mounted to a pole or a flat vertical surface. Easily connect to Sensorbee Air quality unit using the external connector.



## Product specification Type SKU SB3611

Wind range 0.12 to 40 m/s Wind resolution 0.05 m/s Wind accuracy 0.12 m/s Weight 200 gr Direction resolution

1°

Direction accuracy

± 1.5°

Operating temperature

-15°C to 55°C

Dimensions

300 x Ø16 mm

## Sensorbee External Rain Gauge



The rain gauge are reliable and simple to maintain, it can handle all climates. Proven self-emptying bucket technology to ensure uninterrupted measurement of precipitation regardless of amount and intensity.

It measures rain by means of a standardised orifice funnel. The design offers a long-term accuracy because of its counterweight is not affected by dirt and dust accumulation. Connect to Sensorbee Air quality unit using the external connector.



## Product specification Type SKU SB3631

#### **Dimensions**

120 x 55 x 55 mm

#### Weight

300 gram

## **Material**

Polyamide

## **Operating Temperature**

-40°C to +60°C

#### **Operating Humidity**

0 to 99 %RH

## **Typical accuracy**

±0.2 mm

#### Resolution

0.2 mm

## Measuring range

-0°C to +60°C

#### Orifice area

Ø200 cm2

#### **Mounting bracket**

universal pole bracket Included

## **Bird protection spikes**

Included

