

senzemo

Portfolio



Empowering society with cutting-edge IoT sensors for a resource-efficient and sustainable world.

Our mission

06

Indoor Microclimate

08

Outdoor Microclimate

10

Soil Moisture

12

Ambient

14

Temperature Only

16

Temperature Buffer



18

Temperature Probe

20

Food Temperature

22

Compost Temperature

24

Rain Meter

26

Leaf Wetness

28

Air Quality

# Indoor Microclimate



Indoor Microclimate LoRaWAN sensor, SMC30 collects data for temperature, relative humidity, and air pressure.



NEW  
UPDATE

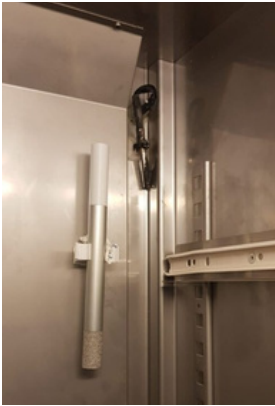


## Features

Indoor use · Temperature, relative humidity and air pressure · Motion detection · High and Low parameters alarm values · Sensor manipulation alert · Battery level feedback · Reconfiguration Over The Air · Standardized sensor enclosure - IP65 rated · Easy to install with included mounting kit · Up to 50 km of range (LOS)

**SMC30** updated version now features also:

- Data logging (up to 7 days)
- Magnet-based reset
- LED Status Indicator



## Tech specs

Temperature: Range -40°C to +65°C; Accuracy  $\pm 0.2^{\circ}\text{C}$  ·  
Relative Humidity: Range 0% to 100%; Accuracy  $\pm 1,8\%$  ·  
Atmospheric pressure: Range 880 to 1080 hPa; Accuracy  $\pm 1$  hPa · Accelerometer: Range  $\pm 2$  g to  $\pm 16$  g; Accuracy  $\pm 40$  mg · Dimensions: 18 mm x 210 mm

## Applications

Harsh industry · HVAC · Cold chain management ·  
Temperature-controlled supply chain · Museums ·  
Data centers · Smart buildings · Energy audits ·  
Precision agriculture



## Connectivity

Connect on LoRaWAN 868 MHz, 915 MHz and 923 MHz  
(all frequencies available)

## Power supply

Powered by 2x AAA batteries (up to 7 years)

Data sheet



# Outdoor Microclimate



Outdoor Microclimate LoRaWAN sensor with shield,  
SMC30-OUT measures temperature,  
relative humidity, and air pressure.



NEW  
UPDATE

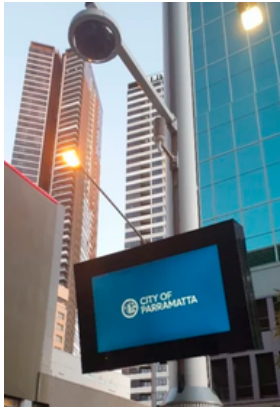
**SMC30-OUT** updated version  
now features also:

- Data logging (up to 10 days)
  - Magnet-based reset
  - LED Status Indicator



## Features

Outdoor use · Temperature, relative humidity and air pressure · Motion detection · High and Low parameters alarm values · Sensor manipulation alert · Battery level feedback · Reconfiguration Over The Air · Standardized sensor enclosure - IP65 rated · Easy to install with included mounting kit · Up to 50 km of range (LOS)



## Tech specs

Temperature: Range -40°C to +65°C; Accuracy  $\pm 0.2^{\circ}\text{C}$  ·  
Relative Humidity: Range 0% to 100%; Accuracy  $\pm 1,8\%$  ·  
Atmospheric pressure: Range 880 to 1080 hPa; Accuracy  $\pm 1$  hPa · Accelerometer: Range  $\pm 2$  g to  $\pm 16$  g; Accuracy  $\pm 40$  mg · Dimensions: 18 mm x 210 mm

## Applications

Smart cities · Agriculture Energy audits · Thermal comfort · Environmental, animal conservation and preservation · Research projects



## Connectivity

Connect on LoRaWAN 868 MHz, 915 MHz and 923 MHz (all frequencies available)

## Power supply

Powered by 2x AAA batteries (up to 7 years)

Data sheet



# Soil Moisture



SSM40 is a reliable Soil Moisture LoRaWAN sensor optimizing irrigation in agriculture and smart parks.



## Features

Outdoor use · Soil moisture measurements · Motion detection · High and Low parameters alarm values · Sensor manipulation alert · Battery level feedback · Reconfiguration Over The Air · Standardized sensor enclosure - IP68 rated · Easy to install with included mounting kit · Up to 50 km of range (LOS) · Sensors sends data completely submerged underground



## Tech specs

Operating temperature range -40°C to +85°C · 75Mhz capacitive sensor · 0.5 m/1,5 m/5 m cable · Probe dimensions: 20x140mm · IP68 rating · Senstick dimensions: 105x27mm · Also available with Meter EC-5 soil probe



## Applications

Monitoring soil moisture · Agriculture, Smart Cities, parks, vineyards, golf courses, wildlife preservation · Automated irrigation system: Greenhouses, Urban agriculture, Green roofs



## Connectivity

Connect on LoRaWAN 868 MHz, 915 MHz and 923 MHz (all frequencies available)

## Power supply

Powered by 3.6V lithium battery (up to 7 years)

Data sheet



# Ambient



Ambient sensor **SAM20** monitors temperature, humidity and air pressure to protect storages and reduce energy waste.



## Features

Indoor use · Temperature measurements · Humidity measurements · Air pressure measurements · High and Low parameter alarm values · Sensor manipulation alert · Battery level feedback · NFC and Over The Air Reconfiguration · Standardized sensor enclosure · IP20 rated · Easy installation and integration · Customizable settings · Up to 7 years of battery life · LoRaWAN ready

## Tech specs

Temperature: Range 0°C to +50°C; Accuracy  $\pm 0.2^\circ\text{C}$  ·  
 Relative humidity: Range 0% to 100%; Accuracy  $\pm 1.8\%$  ·  
 Air pressure: Range 300 to 1200hPa; Accuracy  $\pm 1\text{hPa}$  ·  
 Acceleration: Range  $\pm 2\text{g}$  to  $\pm 16\text{g}$ ; Accuracy  $\pm 40\text{mg}$  ·  
 Battery: 1 × 1.5V AA · IP rating: IP20 · Senstick dimensions: 132x29x25mm.

## Applications

Data centers · Museums · Warehouses · Storages ·  
 Retail · Indoor environmental monitoring ·

## Connectivity

Connect on LoRaWAN 868 MHz, 915 MHz and 923 MHz  
 (all frequencies available)

## Power supply

Powered by 1 x 1.5V AA Alkaline battery (up to 7 years)

Data sheet



# Temperature Only



Temperature Only Sensor **STO10** is a cost-effective temperature solution, ideal for HACCP and Cold Chain monitoring.



## Features

Indoor use · Temperature measurements · Motion detection · High and Low parameters alarm values · Sensor manipulation alert · Battery level feedback · Reconfiguration Over The Air · Standardized sensor enclosure - IP68 rated · Easy to install with included mounting kit · Up to 50 km of range (LOS) · Device logs 10 days of data (at 15 min send period)

## Tech specs

Temperature: Range  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$ ; Accuracy  $\pm 0,2^{\circ}\text{C}$   
 · Accelerometer: Range  $\pm 2\text{ g}$  to  $\pm 16\text{ g}$ ; Accuracy  $\pm 40\text{ mg}$   
 · Sensor dimensions: 105x25mm

## Applications

Food temperature · Food storage temperature · Cooking temperature · Hotel food safety · Kitchen & Restaurant personnel · Digitisation of food safety bureaucracy

## Connectivity

Connect on LoRaWAN 868 MHz, 915 MHz and 923 MHz (all frequencies available)

## Power supply

Powered by 1 x 1.5V AA Alkaline (up to 7 years)

Data sheet



# Temperature Buffer



Food simulant sensor **STB10** monitors dual temperature to ensure HACCP compliance reflect thermal inertia and reduce false alarms.



## Features

Indoor use · Temperature measurements · Motion detection · High and Low parameters alarm values · Sensor manipulation alert · Battery level feedback · Reconfiguration Over The Air · Standardized sensor enclosure · IP67 rated · Easy to 10 km of range (LOS) · Device logs 10 days of data (at 15 min send period)

## Tech specs

Temperature: Range  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$ ; Accuracy  $\pm 1^{\circ}\text{C}$  ·  
 Accelerometer: Range  $\pm 2\text{ g}$  to  $\pm 16\text{ g}$ ; Accuracy  $\pm 40\text{ mg}$  ·  
 Glass bead buffer: 1.25-1.56 mm · Sensstick dimensions: 150x25mm



## Applications

Food temperature · Food storage temperature ·  
 Cooking temperature · Hotel food safety · Kitchen &  
 Restaurant personnel · HACCP digitalization · Cold  
 Rooms · Warehouses · Storages · Retail



## Connectivity

Connect on LoRaWAN 868 MHz, 915 MHz and 923 MHz  
 (all frequencies available)

## Power supply

Powered by 1 x 1.5V AA Alkaline battery (up to 7 years)

Data sheet



# Temperature Probe



Industrial LoRaWAN probe sensor, STP40 measures temperature and is suitable for different industries.



## Features

Outdoor use · Temperature Measurement · Motion detection · High and Low parameters alarm values · Sensor manipulation alert · Battery level feedback · Reconfiguration Over The Air · Standardized sensor enclosure - IP68 rated · Easy to install with included mounting kit · Up to 50 km of range (LOS)



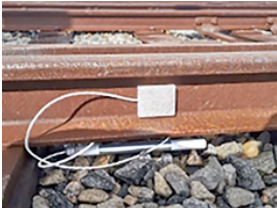
## Tech specs

Temperature: Range  $-55^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ ; Accuracy  $\pm 0.5^{\circ}\text{C}$  ·  
 Accelerometer: Range  $\pm 2\text{ g}$  to  $\pm 16\text{ g}$ ; Accuracy  $\pm 40\text{ mg}$  ·  
 Temperature Probe Dimensions:  $5\text{mm} \times 50\text{mm}$  ·  
 Senstick Dimensions:  $105 \times 27\text{mm}$



## Applications

Water tank temperature · River temperature · Railway temperature monitoring · Mulch temperature · Precision agriculture



## Connectivity

Connect on LoRaWAN 868 MHz, 915 MHz and 923 MHz (all frequencies available)

## Power supply

Powered by 3.6V lithium battery (up to 7 years)

Data sheet



# Food Temperature



Food Probe Sensor STF40 is great for measuring food storage and cooking temperature.



## Features

Indoor use · Temperature measurements · Motion detection · High and Low parameters alarm values · Sensor manipulation alert · Battery level feedback · Reconfiguration Over The Air · Standardized sensor enclosure - IP68 rated · Easy to install with included mounting kit · Up to 50 km of range (LOS)

## Tech specs

Temperature: Range  $-40^{\circ}\text{C}$  to  $+380^{\circ}\text{C}$ ; Accuracy  $\pm 1^{\circ}\text{C}$  ·  
 Accelerometer: Range  $\pm 2\text{ g}$  to  $\pm 16\text{ g}$ ; Accuracy  $\pm 40\text{ mg}$  ·  
 Food probe dimensions:  $4 \times 170\text{ mm}$  · Senstick dimensions:  $105 \times 27\text{ mm}$

## Applications

Food temperature · Food storage temperature ·  
 Cooking temperature · Hotel food safety · Kitchen &  
 Restaurant personnel · Digitisation of food safety  
 bureaucracy

## Connectivity

Connect on LoRaWAN 868 MHz, 915 MHz and 923 MHz  
 (all frequencies available)

## Power supply

Powered by 3.6V lithium battery (up to 7 years)

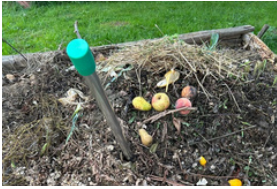
Data sheet



# Compost Temperature



LoRaWAN compost temperature sensor, KOU20 is a cost-effective solution for waste management sites.



## Features

Outdoor use · Temperature monitoring · Motion detection · High and Low parameters alarm values · Sensor manipulation alert · Battery level feedback · Reconfiguration Over The Air · Standardized sensor enclosure - IP68 rated · Easy to install · Up to 50 km of range (LOS)

## Tech specs

Temperature: Range  $-40^{\circ}\text{C}$  to  $+150^{\circ}\text{C}$ ; Accuracy  $\pm 0.5^{\circ}\text{C}$   
 · Accelerometer: Range  $\pm 2\text{ g}$  to  $\pm 16\text{ g}$ ; Accuracy  $\pm 40\text{ mg}$   
 · Dimensions: 3.5 cm x 145 cm

## Applications

Compost temperature · Soil temperature · Mulch, grain temperature · Waste management sites · Fire protection · Food storage silos

## Connectivity

Connect on LoRaWAN 868 MHz, 915 MHz and 923 MHz (all frequencies available)

## Power supply

Powered by 3.6V lithium battery (up to 7 years)

Data sheet



# Rain Meter



Rain Meter LoRaWAN sensor, SRM10  
collects data for rain precipitation.



## Features

Outdoor use · Motion detection · High and Low parameters alarm values · Sensor manipulation alert · Battery level feedback · Reconfiguration Over The Air · Standardized sensor enclosure - IP68 rated · Easy to install with included mounting kit · Up to 50 km of range (LOS)

## Tech specs

Rainfall Metering: Accuracy 2% · Accelerometer: Range  $\pm 2$  g to  $\pm 16$  g; Accuracy  $\pm 40$  mg · Rain Bucket Dimensions: 165mm x 255mm · Senstick dimensions: 105x27mm

## Applications

Smart Agriculture · HVAC · Smart cities · Cold chain management · Temperature-controlled supply chain · Data centers · Smart buildings · Energy audits · Precision agriculture · Environmental conservation and preservation

## Connectivity

Connect on LoRaWAN 868 MHz, 915 MHz and 923 MHz (all frequencies available)

## Power supply

Powered by 3.6V lithium battery (up to 7 years)

Data sheet



# Leaf Wetness



Leaf Wetness LoRaWAN sensor, SLW10 measures the presence and duration of moisture on the surface of leaves.



## Features

Outdoor use · Leaf wetness · Motion detection · High and Low parameters alarm values · Sensor manipulation alert · Battery level feedback · Reconfiguration Over The Air · Standardized sensor enclosure - IP68 rated · Easy to install with included mounting kit · Up to 50 km of range (LOS)



## Tech specs

Accurate leaf wetness percentage % · Accelerometer: Range  $\pm 2$  g to  $\pm 16$  g; Accuracy  $\pm 40$  mg · Leaf probe dimensions: 120x58mm · Senstick dimensions: 105x27mm

## Applications

Leaf wetness detection · Crops disease prevention · Smart agriculture · Vineyards · Orchards · Crop fields

## Connectivity

Connect on LoRaWAN 868 MHz, 915 MHz and 923 MHz (all frequencies available)

## Power supply

Powered by 3.6V lithium battery (up to 7 years)

Data sheet



# Air Quality



Indoor air quality sensor SPU10 monitors CO<sub>2</sub> and TVOC, two of the most important air quality parameters.



## Features

Indoor use · Air quality · CO<sub>2</sub> · TVOC · Temperature, relative humidity and air pressure · High and Low parameters alarm values · Sensor manipulation alert · Battery level feedback · Reconfiguration Over The Air · Easy to install · Up to 15 km of range (LOS)



## Tech specs

CO<sub>2</sub>: Range 400 to 5000ppm; Accuracy  $\pm 30$  ppm ·  
 TVOC: Range 0 to 10mg/m<sup>3</sup>; Accuracy  $\pm 0.5$  mg/m<sup>3</sup> ·  
 Indoor temperature: Range -5°C to +40°C; Accuracy  $\pm 0.2$ °C ·  
 Relative Humidity: Range 0% to 100%; Accuracy  $\pm 1,8\%$  ·  
 Atmospheric pressure: Range 880 to 1080 hPa; Accuracy  $\pm 1$  hPa ·  
 Dimensions: 80 mm x 80 mm x 20mm



## Applications

Buildings · Museums · HVAC · Offices · Municipal buildings · Schools · Universities · Retail stores · Hospitals

## Connectivity

Connect on LoRaWAN 868 MHz, 915 MHz and 923 MHz (all frequencies available)

## Power supply

Powered by 3.6V lithium battery (up to 5 years)

Data sheet



Trusted by



# Our partners



S

Sensedge d.o.o., Podbreznik 15, SI-8000 Novo mesto,  
VAT ID: SI 56852517 | [www.senzemo.com](http://www.senzemo.com) | © Sensedge