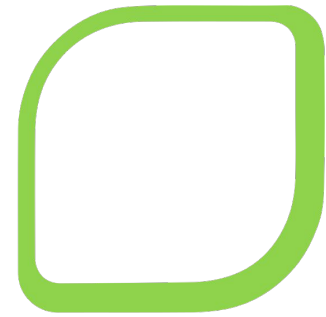


essentim
essential improvement.



ESSENTIM SENSORS

ESSENTIM SOLUTIONS



PROCESS, DEVICE AND ROOM MONITORING

with just one click

SENSORS

sphere, spot, spider, smart power meter



SCOUTER LIGHT

gateway Bluetooth module



EXTENSIONS

high precision
Plug & Play extensions



SENSOR EXTENSIONS

types

TEMPERATURE

e.g. PT100, K-Type, J-Type, Thermal
Conductivity

GASES

e.g. CO₂, VOC, O₂

MECHANIC FORCES

e.g. Weight

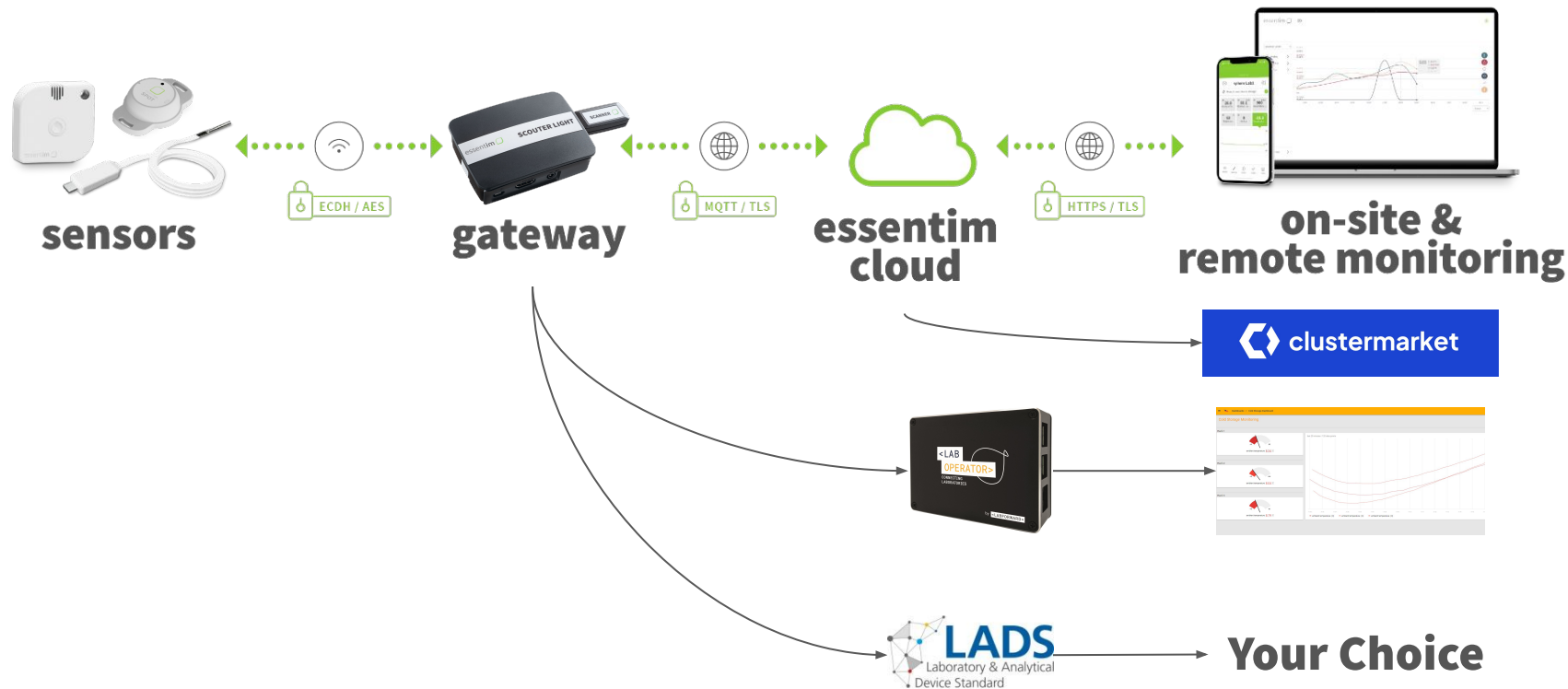
INDIVIDUAL SOLUTION

Contacts us now: info@essentim.com



MONITORING SOLUTION ARCHITECTURE

remote or on-site monitoring



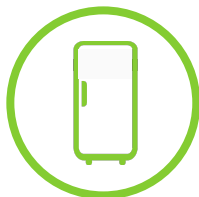
APPLICATIONS

for laboratory monitoring



FREEZER

- device function
- samples
- ultra low temperature



INCUBATOR

- device function
- samples
- temperature, O₂, CO₂, humidity



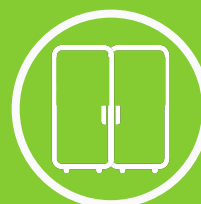
SAMPLE

- environment
- motion and light
- carried over the entire course



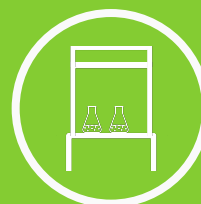
ROOM MONITORING

- air quality
- light / working time
- temperature



STORAGE

- samples
- reagents
- instruments



WORKSTATION

- environment
- air quality
- bench / laminar flow

SCOUTER LIGHT



Article No.: 1SCT1ES002
Dimensions: 85 x 65 x 17 mm
Weight: 115 g

Specifications:

- Wireless collection of all data from the compatible sensors
- Data transmission to the Cloud via network cable or optional via WiFi
- Automatic measurement recovery
 - when sensor is moved out of range
 - if wireless connection is disturbed

PRODUCT OVERVIEW






sensors



SPHERE

Article No.: 1SPH2ES001
Dimensions: 66 x 66 x 23 mm
Weight: 80 g

Specifications:




 Temperature	-10 to +58 °C (typ. ± 0.3 °C)
 Humidity	0 – 100 % rH (typ. ± 2 %)
 Atmospheric pressure	300 – 1100 hPa (typ. ± 1.0 hPa)
 Brightness	0 – 100 %
 Movement	motion (1) / no motion (0)



SPOT

Article No.: 1SPO1ES001
Dimensions: 19 x 80 x 51 mm
Weight: 35 g

Specifications:

 Temperature	-30 to +60 °C (typ. ± 0.5 °C), limited by battery
 Movement	motion (1) / no motion (0)
 Reed-Contact	open (1) / closed (0)

PRODUCT OVERVIEW

sensors



SPIDER

Article No.: 1SPI3ES001
Dimensions: 150 x 94 x 28 mm
Weight: 140 g

Specifications:

- Up to 4 extensions simultaneously
- Potential free contact to connect to BMS (Building Management System)
- Battery or mains operation
- Magnetic mount



SPIDER with display

Article No.: 1SPI4ES001
Dimensions: 150 x 94 x 28 mm
Weight: 190 g

Specifications:

- Up to 4 extensions simultaneously
- Potential free contact to connect to BMS
- Magnetic mount
- Display all parameters in real time



Smart Power Meter

Article No.:	1PM2ES001-EU / -UK / -US
Dimensions:	150 x 94 x 28 mm
Weight:	140 g

Specifications:

- Measures Watt / Volts / Amperage
- Manual Turn-off Switch to cut power
- Available with PE for EU, UK and US Plugs

PRODUCT OVERVIEW

extensions



PT100 extension

Article No.:	1PEX2ES003
Dimensions:	35.5 x 14 x 8 mm
Cable:	3 m, \varnothing 1.7 mm
Probe:	50 mm, \varnothing 4 mm
Weight:	40 g

Specifications:



Temperature

-90 to +60 °C typ. class A accuracy
-196 to -90 °C typ. \pm 3 °C (drift max 1 °C/year)



K-Type extension

Article No.:	1KEX2ES003
Dimensions:	35.5 x 14 x 8 mm
Cable:	1, 2 or 3 m, \varnothing 2.4 mm
Probe:	50 mm, \varnothing 4 mm
Weight:	15 - 40 g

Specifications:



Temperature

-40 to +375 °C (typ. \pm 1.5 °C)

PRODUCT OVERVIEW




extensions



CO2 extension

Article No.:	1CEX2ES001
Dimensions:	35.5 x 14 x 8 mm
Cable:	3 m, \varnothing 1.7 mm
Probe:	50 mm, \varnothing 6 mm
Weight:	50 g

Specifications:

 Temperature	-20 to +85 °C (typ. \pm 0.3 °C)
 Humidity	0 – 95 % rH (typ. \pm 2 %)
 CO2	0 – 25 vol% (0.5 vol% +3 % measured value) 0 – 100 vol% (1 vol% +3 % measured value)



I/O extension

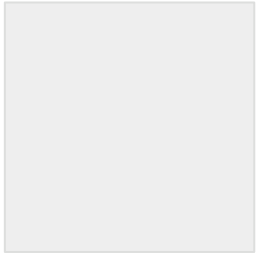
Article No.:	1PCX1ES001
Cable:	3 m, \varnothing 4 mm
Weight:	50 g

Specifications:

- I/O extension is used to connect to discrete digital outputs like potential free contacts
- application: connect to potential free contact of existing equipment to make device alarms available within essentim system

PRODUCT OVERVIEW

extensions



Analogue extension 4-20 mA

Article No.: individual
Cable: 3 m, \varnothing 4 mm
Weight: 50 g

Specifications:

- Used to operate industrial grade or analogue sensors via essentim Sensors
- Supports 0-10 V / 0-20 mA / 4-20 mA analogue output
- Powersupply can be individually provided to meet analogue sensor requirements (e.g. 12 V / 24 V / 48 V)
- essentim can assist to select analogue sensor probe upon request



pt100 flex Lemo-Plug

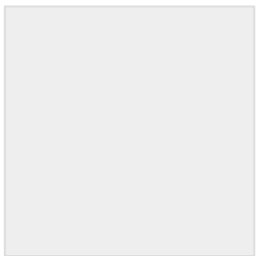
Article No.: 1PEX2ES013
Cable: 2 m, \varnothing 4 mm
Weight: 60 g

Specifications:

- pt100 sensor extension for essentim sphere or spider with a Lemo connector and a 2m shielded wire

PRODUCT OVERVIEW

extensions



Water Leakage Detector

Article No.: 1WLX1ES001
Cable: 3 m, \varnothing 4 mm
Weight: 50 g

Specifications:

- Spill Detection on Laboratory Floors: Ensures immediate response to spills, enhancing safety protocols.
- Spill Detection Inside Fume Hoods: Monitors and detects chemical spills, reducing exposure risks.
- Increased Workplace Safety: Implementation of advanced spill detection systems to prevent accidents and ensure a safer working environment.

Including many others, such as

- **VOC Sensors**
- **Optical Temperature Sensor**
- **Infrared Technologies and**
- **Movement Detector**

For your unique requirements, lets start a conversation:

info@essentim.com

All essentim sensor products are checked after production to fulfill the specified measurement range , accuracy and repeatability. At essentim we regularly check the quality of our sensor products to ensure peak quality to our customers.

Sensor extensions (PT100, Type-K & CO2) are individually adjusted during production comparing against a highly accurate DakKs calibrated probe.

Ex-Works individual calibration:

If you require specific calibration for certain working points within your lab that are not covered by our standard portfolio, we can offer to individually adjust our probes. Please contact sales@essentim.com

Yearly supervision and re-calibration:

Every sensor product by essentim can be handed over to a calibration laboratory to create an up-to-date calibration certificate. essentim will gladly assist you here. You can send back the devices to us and we will handle the process with the respective calibration lab on an individual quote basis. We try to nearsource and this is why we work with the ESZ AG Calibration Lab in Eichenau close to munich.

Do I need to calibrate every sensor every year at a calibration laboratory?

Typically the answer is “it depends”. It depends on the quality system and measures you have in place whether you need to re-calibrate each sensor every year. Most of the time the answer can be “No, but you at least have to check them regularly by comparing them with a recently calibrated unit”.

How can I approach the process of checking my sensors regularly?

Instead of spending lots of resources on re-calibration of all sensor devices every year, one can also just apply a process of regularly checking the performance of sensors with a recently calibrated sensor:

Imagine you have about 20 - 30 temperature sensors in your lab. Instead of sending all of them to calibration every year, you can also go about checking them with a calibrated unit in a round robin manner. E.g. buy a separate “control” sensor which you send to calibration every year to get a respective certificate. Use this control sensor to check the performance of your currently installed sensors and document this process referencing the certification of the “control” sensor.