User Guide

essent**im**

scouter light

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Notes

⚠	Warning: This symbol represents a warning. It describes a dangerous situation or indicates safety risks.
👉	Note: This symbol indicates important information.
🗑	The symbol of a crossed-out dustbin indicates that this device contains electronic components and must not be disposed of with household waste in accordance with Directive 2002/96/EC (WEEE).

Legal notice

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Warranty and liability

The device complies with the basic safety and health requirements of the relevant EU regulations and has been tested for proper functioning at the factory. When claiming warranty, the device number must be indicated (see product label on the device). Failure to comply with the manufacturer's specifications or legal requirements or unauthorized modifications to the equipment or unauthorized replacement of individual parts or accessories may significantly impair the electrical safety of this product and void the warranty. Any liability, property damage or personal injury resulting from the device being used contrary to the instructions in this manual is excluded. We reserve the right to make technical design and execution changes at any time without prior notice as a result of continuous further development and product improvement. No liability is accepted for damage resulting from improper use. Warranty claims are then also void. Liability for any damage to property or personal injury that occurs is then transferred to the operator.

Safety Instructions

Read these instructions carefully before commissioning and using the device and always keep the instructions within easy reach!

⚠️ **Warning**
Always observe all safety instructions in this document! Non-observance may result in personal injury or damage to property! Always keep the safety instructions and the user manual permanently always keep the safety instructions and the user manual in an accessible and permanent place.

- Observe all technical limits as well as storage conditions for the device.
- If there is obvious damage to the device, it must be taken out of service and stored safely.
- Do not attempt to repair or modify the device. For maintenance and repair, the device must be sent to the manufacturer or to an agency designated by the manufacturer.
- Before operation, the safety instructions and the user manual must have been read and understood by the user. The device may only be operated by persons to whom this applies.
- In addition to the instructions and safety notes in this manual, the basic regulations for occupational safety must be observed.
- The system is safe and reliable and complies with the relevant EU directives. Improper use may result in damage to the user, third parties or material objects.
- Maintenance or repairs may only be performed by the manufacturer or by persons or companies authorized by the manufacturer.
- Clean the device only according to the cleaning instructions in this operating manual.
- Do not operate the device in potentially explosive atmospheres, aggressive atmospheres or explosion protection zones.
- The device is not a toy. Keep the device away from children and animals.
- Avoid contact with liquids or high humidity.
- Avoid the penetration of liquids into the device.
- Protect the device from permanent direct sunlight.
- Do not remove any safety signs, stickers or labels from the device. Keep all safety signs, stickers and labels in a legible condition.
- Do not open the device!
- The product should not be sterilized!

Intended Use and User

The scouter light is the base station for the essent**im** wireless sensor network. It connects the essent**im** sensors to the essent**im** cloud. Sensors can be managed, measurement data stored and processed, visualized and analysed in the cloud. The gateway scouter light is set up stationary in a normal room climate.

⚠️ **Warnung**
Beachten Sie stets die hier angegebenen, sicheren Betriebsbedingungen! Missachtung kann zu Personen- und/oder Sachschäden führen.

- 0°C to +40°C, non-condensing humidity up to 70%, ambient pressure.
- The scouter light is a stationary unit, select a safe and central location. Observe the scouter positioning guide in this operating manual!
- Only cables and extensions approved by essent**im** may be used with the scouter light.
- Avoid mechanical stress on the device; damage to the housing may result in damage to the electronics. This can lead to defects, short circuits and temperature development.

The user is for example a trained laboratory employee / assistant / technician / IT employee / student. Each user must have read and understood the safety instructions and the operating instructions.

Device Description

General Information

The scouter light is the central point of the essent**im** wireless sensor network. It collects the data from the essent**im** sensors and forwards it to the essent**im** cloud.

For more information on the essent**im** wireless sensor network, please refer to the "essent**im** Sensor Cloud" operating instructions.

scouter light

Technical Data

Manufacturer	essentim GmbH
Model	scouter light
Type	Wireless Sensor Network Server / Gateway
Power supply	5V DC (max. 3A)
Operating condition (EN / IEC 61010-1)	
• Operating location	Indoor, no use or storage in explosive atmospheres.
• Ambient temperature	0 °C to +50 °C
• Humidity	Maximum 70 % relative humidity, non-condensing
• Altitude	5000 m
• Other	Do not expose to chemicals or mechanical stress. The product should not be sterilized! Observe the cleaning instructions in the user manual to prevent damage.
Storage and loading conditions	
• Temperature	0°C to 40°C
• Humidity	10 to 50%
• Other	Protected from frost and heat, not in contact with hazardous substances in a place protected from dust and sunlight.
Compliances CE	ETSI EN 300 328 V2.2.2: 2019 ETSI EN 301 893 V2.1.1: 2017 ETSI EN 301 489-1 V2.2.3: 2019 ETSI EN 301 489- 17 V3.1.1: 2017 IEC EN 62368-1: 2018 BS EN 62311: 2008 IEC EN 63000: 2018
Other Conformities	CB, FCC, IC, UK, CCC, UL und weitere
Flammability Rating PCB	UL94-V0
Other information	
- Operating system	Embedded Linux (Raspbian)
Interfaces	LAN / RJ 45 100 MBit / Wifi 4 x USB-A port (scanner stick connection) 1 x Micro-USB port for power supply 1 x HDMI
Dimensions	85 x 65 x 17 mm
Weight	115 g

Transport and Storage

Warning

Improper transport may result in personal injury and/or damage to property.
Always observe all instructions for safe transport.

The scouter light must be secured during transportation to prevent possible mechanical impact. The scouter light must not be transported during operation. The scanner stick must be removed before each transport.

Unused scouter lights should be stored away from dust, sunlight and moisture.

Note

Observe the storage conditions for the device specified in the "Technical data" chapter.

Commissioning

When using the scouter light for the first time, the following steps must be performed:
1. Set up system
2. Establish connection to the essent**im** Cloud

Installing the system

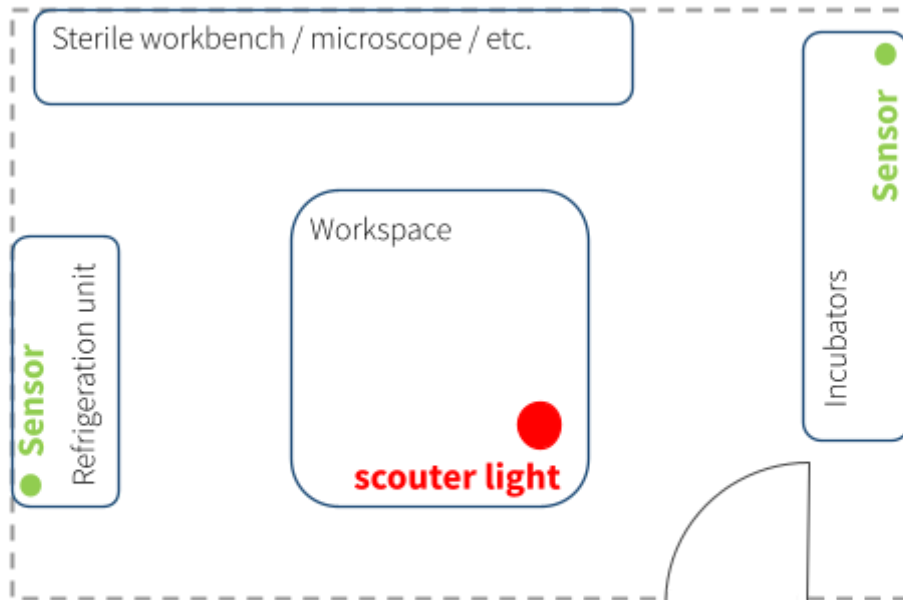Plug the enclosed Scanner Stick into one of the USB ports:

Positioning

Do's	Don'ts
● The device should be clearly visible from any point in the laboratory	● Do not position the device in a cabinet or behind large devices or obstacles
● Position the scouter light with a tendency towards the incubators as these strongly shield signals	● The Scanner Stick must not be covered by objects
● The scanner stick must be freely accessible	● The device must not be surrounded by large (metallic) objects
● Position the scouter light in a place protected from dust, sunlight and moisture	● Do not use accessories that show external damage or strange behavior
● Position the device and all cables so that no one can trip over them	● Only use accessories approved by essent**im**

essent**im** recommends the following procedure for positioning:

1. Position the scouter light at your desired location, taking into account the "Do's and Don'ts".
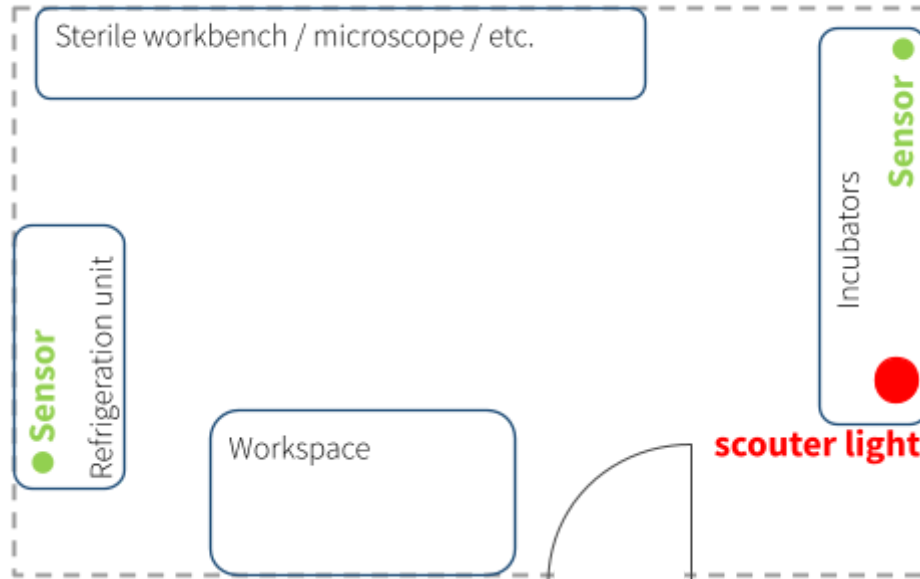
   Example 1

2. Use an essent**im** sensor unit (sphere, spot or spider) to test the reception properties at various critical points in the laboratory:

   Place the sensor unit in the furthest incubator or refrigerator. Check on the dashboard of the essent**im** Wireless Sensor Network whether data is still being received from the corresponding sensor unit.

   - ○ Data is being received: Positioning ok, gateway receives signals from "worst case positions"

   - ○ Data is not being received: Change the orientation of the scanner stick or the position of the scouter light

If you do not have the possibility to place the scouter light centrally in the laboratory, a position near the incubators should be chosen:

Example 2

Use an essentim sensor unit to test the reception properties at various critical points in the laboratory (described in example 1).

Note

If you do not achieve full signal coverage in your laboratory, you will not lose any data. The sensor units save all measurement data and deliver it as soon as you are back in the reception range. Please note, however, that the capacity of the local memory of the sensor units is limited.

Note

Devices that are outside the reception area are displayed as offline after a certain time. As soon as the device is back in the reception area, the device appears as online again. No live data can be displayed for devices outside the reception area.

3. Connect the scouter light to a 230 V power supply using the enclosed mains adapter. If the device is properly connected to the mains, the power LED lights up green.

Cleaning, Maintenance and Repair

Cleaning
The scouter can be cleaned with a damp cloth. essent**im** GmbH recommends the following procedure for cleaning:

1. Switch off the device (unplug it).

2. Clean the surface with a microfiber cloth or a cloth moistened with water.

3. Wait until the surface is completely dry again

4. The scouter light can be used again

⚠️ **Warning**
The scouter light should not be sterilized! essent**im** GmbH does not give approval for sterilization processes of any kind, as both thermal and chemical processes can destroy the scouter and cause damage to property and personal injury!

Maintenance and Repair
The scouter light is maintenance-free. Updates are provided automatically via the essent**im** cloud connection.

Defect
In case of a defect, please contact essent**im** GmbH.
support@essentim.com
www.essentim.com

Disposal

The scouter light is marked in accordance with the EU Directive on Waste Electrical and Electronic Equipment (WEEE).

WEEE registration number of essent**im** GmbH: DE 22316070.

This product should not be disposed of with household waste.

The scouter light can be taken to a designated primary treatment facility for the disposal of electrical and electronic equipment at your own expense for environmentally sound disposal. As a designated B2B product, you can alternatively return the scouter (sufficiently stamped) to essent**im** GmbH. We will dispose of the device at our expense in a proper and environmentally friendly manner.

Changelog

20.02.2020	Erstellung der Bedienungsanleitung	V 1.0
01.02.2024	Anpassungen & englische Version	

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