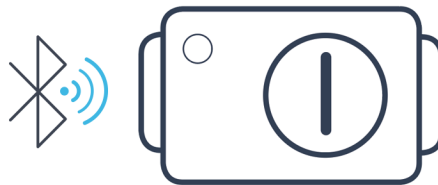

User Guide

S-2CONNECT Sense



S19P01

1 Contents

2	Introduction	3
2.1	Packet contents	3
3	Environmental information	3
4	Safety precautions and prohibited handling	4
5	General guidelines	5
6	Installation and usage	6
6.1	Install the battery	6
6.2	Mounting	6
6.3	Switching the device on	7
6.4	Using the Device	7
6.5	Battery Operation	7
6.6	LED Functionality	7
7	Operating and maintenance recommendations	7
8	Error handling, faults and repairing	8
8.1	Error handling	8
8.1.1	First action	8
8.1.2	No radio communication	8
8.2	Faults and repairing	8
9	Accessories and peripherals	8
10	Technical parameters	9
10.1	Technical data	9
10.2	Radio frequencies	9
11	Compliances	10
11.1	Declaration of Conformity	10
11.2	FCC Compliance	10
11.3	Approved module	10
11.3.1	Telit BlueMod+S42	10
11.3.1.1	FCC Labelling	10
11.3.1.2	Bluetooth Qualification	10

General Note

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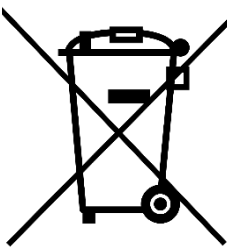

2 Introduction

Thank you for choosing a TT Electronics product. Please read the user guide before bringing this device into service.

2.1 Packet Contents

1. S-2CONNECT Sense
2. Battery Hatch Key
3. Quick Start Guide


3 Environmental information


 	<p>This symbol on the device or the package means that all electronic and electrical equipment should not be mixed with general household waste. The disposal of the device after its lifecycle could harm the environment. Do not dispose the unit (or batteries) as unsorted municipal waste; it should be taken to a specialised company for recycling. This device should be returned to your distributor or to a local recycling service. Respect the local environmental rules.</p> <p>If in doubt, contact your local waste disposal authorities.</p> <p>Please go to www.s-2connect.com for more information.</p>
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REACH

TT Electronics complies with the REACH (Registration, Evaluation, Authorisation, and Restriction of Chemicals regulatory framework). Read more at www.s-2connect.com

4 Safety Precautions and Prohibited Handling

	<p>DO NOT ATTEMPT TO INSTALL, USE OR MAINTAIN THE S-2CONNECT Sense UNITL YOU HAVE READ AND FULLY UNDERSTOOD THESE INSTRUCTIONS. BE SURE THIS INFORMATION REACHES THE OPERATOR AND STAYS WITH THE PRODUCT AFTER INSTALLATION. DO NOT PERMIT UNTRAINED PERSONS TO INSTALL, USE OR MAINTAIN THIS PRODUCT.</p> <p>Inspect the device for physical damage and contamination. Do not connect the device, or accessory if you detect oil, grease, water, broken or damaged parts.</p> <p>When unpacking the device, make sure to handle it with care. Rough handling may shock the device, causing damage. Check that the device is free from cracks, fractures, leakage.</p> <p>Do not place the device near any other device that may cause sparks (such as a switch or a fuse). The battery may generate flammable gas when charged, so always ensure the battery is kept away from open fire and/or flames to prevent sparks from igniting or causing explosions.</p> <p>Do not allow the device to be immersed in water/sea-water.</p> <p>Do not attempt to disassemble or destroy the unit. The product must be handed over to an authorized workshop for maintenance and to a suitable recycling station when it is taken out of service.</p> <p>Use this product only within specified temperatures.</p> <p>Do not place other products or objects on top of S-2CONNECT Sense or the performance of the device internal antennas may be compromised.</p>
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	<p>This product contains a battery. The battery is replaceable.</p> <p>Pay special attention to the battery if the product is taken out of use, and if the product is up for disposal. Dispose used batteries as hazardous waste.</p>
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5 General Guidelines



Familiarise yourself with the functions of the device before using it.

All modifications of the device are forbidden for safety reasons. Damage caused by user modifications to the device is not covered by warranty.

Only use the device for its intended purpose. Using the device in an unauthorised way will void the warranty.

Damage caused by disregard of guidelines in this manual is not covered by the warranty and the dealer will not accept responsibility for any ensuing defects or problems.

TT Electronics, nor its authorised resellers can be held responsible for any damage (extraordinary, incidental or indirect) – of any nature (financial, physical....) arising from possession, use or failure of this product.

Due to constant product improvements, the actual product appearance might differ from the shown images.

General Note

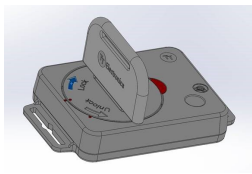
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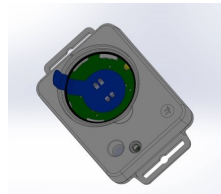
6 Installation and usage

1. Make sure there is no damage to the equipment.
2. Choose your suitable installation location. Consider the environmental requirements and be advised that this device contains antennas that could be affected from other equipment within close range.
3. Remove the battery isolation tab. See below for instructions.
4. Check the LEDs to verify proper operation.

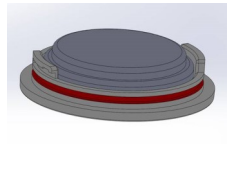
6.1 Activating and replacing the battery



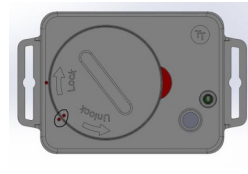
1. Use the battery hatch key provided to open or close the battery hatch.



2. To activate the battery, lift the battery hatch and remove the battery isolation tab.



3. When replacing the battery, pay attention to the plus and minus indicators.



4. Close the battery hatch carefully using the battery hatch key. Ensure the hatch is aligned with the indicator as shown.

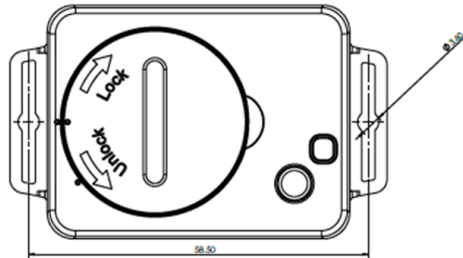
6.2 Mounting

This product can be mounted on any type of surface with standard screws (not included in the package). It can be mounted in any desirable direction except that the device should not be mounted with the battery hatch upwards if there is any risk for water or other fluids pouring over the device. The device can be used as a portable device and does not require fixed installation.



If the product is mounted on metallic surface or close to substantial amount of metal the antenna performances may become compromised. For full functioning antenna performance, the device should be mounted not less than 30mm from metal.

Avoid placing the unit close to powerful electromagnetic equipment.



6.3 Switching the Device on

This device switches on automatically following insertion of the battery.

6.4 Using the Device

This device is intended for restrict remote operation. Log in to your user interface to interact with the device.

6.5 Battery Operation

The battery operation time is depending on configuration, surrounding temperature and other parameters. It can be up to 12 months.

6.6 LED Functionality

S-2CONNECT Sense is equipped with a LED, that operates as:

- Long Blink at battery insertion
- Short Blink when communicating with S-2CONNECT Hub

7 Operating and Maintenance Recommendations

Ensure the device is operated within the correct operating temperatures.

This product requires no maintenance. It can be wiped clean with a damp cloth.

General Note

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8 Error Handling, Faults and Repairing

8.1 Error Handling

8.1.1 First Action

If the device does not operate as expected the first step is always to check if the battery is fresh. Low battery LED indication should indicate if the battery level is too low, but if you detect malfunction do always replace the battery as the first step to get back to normal operation.

8.1.2 No Radio Communication

S-2CONNECT Sense use Bluetooth LE for communication with S-2CONNECT Hub. Check that S-2CONNECT Sense is within radio communication distance from the S-2CONNECT Hub.

Other radio frequency devices may disturb the communication between S-2CONNECT Sense and S-2CONNECT Hub. Try to move the units to another area if you suspect this might be the case.

8.2 Faults and Repairing


Faulty devices shall always be replaced. Do not try to repair the unit. The unit is sealed and cannot be opened without destroying the device.

9 Accessories and Peripherals


S-2CONNECT Sense is part of a series of products including devices that can interoperate with S-2CONNECT Hub. Check the website for more information www.s-2connect.com

10 Technical Parameters

10.1 Technical Data

	S-2CONNECT Sense—Dimensions and Weight								
	33.0 x 64.5 x 9.5 mm (L x W x H), Nominal weight 17g (excluding battery)								
	Battery type								
	CR2450								
	Housing								
	Polycarbonate								
	Operating Temperature								
	-20°C to + 85°C								
	Operating Humidity								
	0 – 95 % RH, non-condensing								
IP Rating									
IP 65									
Sensors Accuracy									
<table border="1"> <tr> <td>Temperature</td> <td>-20°C to + 85°C (+/-0.3%)</td> </tr> <tr> <td>Humidity</td> <td>0 – 100 % RH (+/-2% RH)</td> </tr> <tr> <td>Accelerometer</td> <td>+/-2g (+/-2mg/LSB)</td> </tr> <tr> <td>Light sensor*</td> <td>Detects dark/light</td> </tr> </table>		Temperature	-20°C to + 85°C (+/-0.3%)	Humidity	0 – 100 % RH (+/-2% RH)	Accelerometer	+/-2g (+/-2mg/LSB)	Light sensor*	Detects dark/light
Temperature	-20°C to + 85°C (+/-0.3%)								
Humidity	0 – 100 % RH (+/-2% RH)								
Accelerometer	+/-2g (+/-2mg/LSB)								
Light sensor*	Detects dark/light								
*Only for devices with transparent hosing									

10.2 Radio Frequencies

	Radio technology	
	Bluetooth	
Frequency band		
2.4 GHz BLE		

11 Compliances

11.1 Declaration of Conformity

Simplified EU Declaration of Conformity

TT Electronics hereby declares that S-2CONNECT Sense is in compliance with the essential requirements of the following EU directives:

- RED 2014/53/EU
- RoHS 2011/65/EC
- WEEE 2012/19/EU

Full text of the conformity is available at www.s-2connect.com

This equipment complies with EU radiation exposure limits set fourth for an uncontrolled equipment. This equipment should be installed and operated with minimum distance 20cm between the device and the user and/or any bystander.

11.2 FCC Compliance

S-2CONNECT Sense has been tested to fulfil the FCC requirements. Test reports are available upon request.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense.

11.3 Approved Module

S-2CONNECT Sense includes a pre-approved radio module:

Radio Interface	Manufacturer	Type number
Bluetooth	Telit	BlueMod+S42

11.3.1 Telit BlueMod+S42

11.3.1.1 FCC Labelling

FCC ID: RFRMS42

IC: 4957A-MS42

11.3.1.2 Bluetooth Qualification

The BlueMod+S42 is a qualified design according to Bluetooth Qualification Program Reference Document (PRD) V2.3.

Declaration ID: D032121

Qualified design : 88139

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