

Thingsee TAG User Guide

1. Indented use of Thingsee TAG

Thingsee TAG is used for various activity and environmental measurements. Thingsee TAG hardware has capabilities of measuring:

- Movement (acceleration) and steps counting
- Temperature and humidity
- Magnetic sensing i.e. detecting open/close of e.g. door, window...

Depending on Firmware Thingsee TAG can be set to operate in various use cases e.g. streaming of sensors raw data, streaming internally processed data, logging and storing raw data and logging and storing processed data.

Thingsee TAG is robust and can withstand quite raw conditions and rough handling. Operating temperature range is typically limited by CR2032 battery specifications (refer to manufacturer's specifications). Typically, these batteries will operate from -20°C to +60°C (batteries are not delivered with the device). **Do not exceed battery manufacturer specifications regarding operating temperatures to avoid damage.** Thingsee TAG materials and components can operate from -40°C to +85°C. Thingsee TAG meets at least IP67 requirements.

Operating voltage is from 1.7V to 3.6V.

Thingsee TAG typically needs some application e.g. mobile or PC application that is supporting data transfer of the BLE (Bluetooth low energy) radio. Application can then store sensor data locally for internal analysis and/or relay data for further analysis e.g. to a specific Cloud service.

2. Caution regarding coin cell battery

This product contains a lithium CR2032 coin cell battery. **Do not ingest battery. There is a risk for chemical burn hazard. Swallowed battery can cause severe internal burns in just 2 hours and may even cause death.**

Keep new and used batteries away from reach of children. If battery compartment is not properly and tightly closing stop using of the product and keep it away from children. If you suspect that battery or even the complete product may have been swallowed or placed inside any part of body, seek immediate medical attention. There is a risk of explosion if incorrect or damaged battery is used. Use only good quality and unbroken CR2032 battery.

3. Activating/deactivating Thingsee TAG

Thingsee TAG operates with one CR2032 (LR44) coin cell battery. When battery is attached device is operational and active and when battery is not attached device is not active. Operation time depends on the use case but is typically several months with the new battery.

Activating:

Set one CR2032 (LR44) battery to the battery lid so that battery's negative pole is facing upwards and positive pole facing towards battery lid. Close battery lid by twisting it clockwise from marked starting position to marked close position. Battery lid can be attached only from this one position. Ensure battery lid is tightly closed to maintain waterproofness.

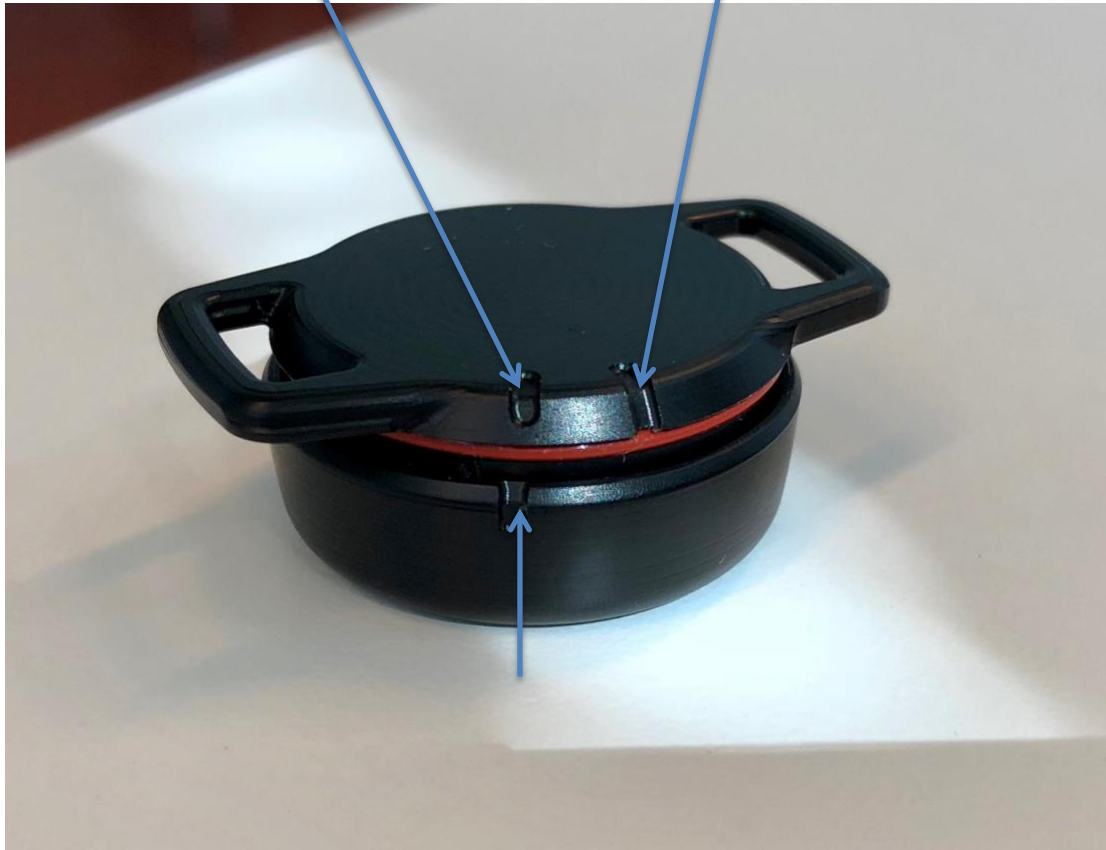


Set battery positive pole towards the positive mark



Battery correctly in place

“Start closing” -position indicator “Closed” - position indicator



Sensor battery lid cover in “start twisting to close” -position

Deactivating:

Open battery lid by twisting it counter clockwise from closed position towards open position and detach battery lid and remove battery from the lid. You may set the battery lid back to device without the battery.

It is recommended to check if there is any wear or damage in insulating O-ring and if there is then change the O-ring insulator to the new one. This O-ring is essential for waterproofness.

4. Installation

Thingsee TAG can be attached freely to e.g. surface, garment, machine... from its battery lid lugs using preferred methods that do not break the lugs or impact the form of the device. Device can be also carried or used "as is" i.e. without firm attaching.

5. Legal notices

Hereby, Haltian Products Oy Haltian Products Oy declares that the radio equipment type Thingsee TAG is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following Internet address: thingsee.com

Suomi: Haltian Products Oy vakuuttaa, että radiolaitetyyppi Thingsee TAG on direktiivin 2014/53/EU mukainen. EU-vaatimustenmukaisuusvakuutuksen täysimittainen teksti on saatavilla seuraavassa internetosoitteessa: thingsee.com

Nederlands: Hierbij verklaar ik, Haltian Products Oy. dat het type radioapparatuur Thingsee TAG conform is met Richtlijn 2014/53/EU. De volledige tekst van de EU-conformiteitsverklaring kan worden geraadpleegd op het volgende internetadres: thingsee.com

Francais: Le soussigne, Haltian Products Oy. declare que l'équipement radioélectrique du type Thingsee TAG est conforme a la directive 2014/53/UE. Le texte complet de la declaration UE de conformite est disponible a l'adresse internet suivante: thingsee.com

Svenska: Harmed forsakrar Haltian Products Oy. att denna typ av radioutrustning Thingsee TAG överensstämmer med direktiv 2014/53/EU. Den fullständiga texten till EU-försäkran om överensstämmelse finns på följande webbadress: thingsee.com

Dansk: Hermed erklærer Haltian Products Oy. at radioudstyrstypen Thingsee TAG er i overensstemmelse med direktiv 2014/53/EU. EU-overensstemmelseserklæringens fulde tekst kan findes på følgende internetadresse: thingsee.com

Deutsch: Hiermit erklart Haltian Products Oy. dass der Funkanlagentyp Thingsee TAG der Richtlinie 2014/53/EU entspricht. Der vollständige Text der EU-Konformitätserklärung ist unter der folgenden Internetadresse verfügbar: thingsee.com

Ελληνικά: Με την παρούσα ο/η Haltian Products Oy. δηλώνει ότι ο ραδιοεξοπλισμός Thingsee TAG πληροί την οδηγία 2014/53/ΕΕ. Το πλήρες κείμενο της δήλωσης συμμόρφωσης ΕΕ διατίθεται στην ακόλουθη ιστοσελίδα στο διαδίκτυο: thingsee.com

Italiano: Il fabbricante, OMATA apparecchiatura radio direttiva 2014/53/UE. Il testo completo della dichiarazione di conformita UE e disponibile al seguente indirizzo Internet: thingsee.com

Espanol: Por la presente, Haltian Products Oy. declara que el tipo de equipo radioeléctrico Thingsee TAG es conforme con la Directiva 2014/53/UE. El texto completo de la declaración UE de conformidad está disponible en la dirección Internet

siguiente: thingsee.com

Portugues: O(a) abaixo assinado(a) Haltian Products Oy. declara que o presente tipo de equipamento de radio Thingsee TAG esta em conformidade com a Diretiva 2014/53/UE. O texto integral da declaracao de conformidade esta disponivel no seguinte endereco de Internet: thingsee.com

Čeština: Tímto Haltian Products Oy. prohlašuje, že typ radioveho zařízení Thingsee TAG je v souladu se směrnicí 2014/53/EU. Uplně znění EU prohlášení o shodě je k dispozici na této internetové adrese: thingsee.com

Eesti: Kaesolevaga deklareerib Haltian Products Oy. et kaesolev raadioseadme tuup Thingsee TAG vastab direktiivi 2014/53/EL nouetele. ELi vastavusdeklaratsiooni taelik tekst on kattesaadav jargmisel internetiaadressil: thingsee.com

Magyar: Haltian Products Oy. igazolja, hogy a Thingsee TAG típusu radióberendezés megfelel a 2014/53/EU irányelvnek. Az EU-megfelelőségi nyilatkozat teljes szövege elérhető a következő internetes címen: thingsee.com

Latviešu valoda: Ar šo Haltian Products Oy. deklarē, ka radioiekārta Thingsee TAG atbilst Direktīvai 2014/53/ES. Pilns ES atbilstības deklarācijas teksts ir pieejams šādā interneta vietnē: thingsee.com

Lietuvių kalba: Aš, Haltian Products Oy. patvirtinu, kad radijo įrenginių tipas Thingsee TAG atitinka Direktyvą 2014/53/ES. Visas ES atitikties deklaracijos tekstas prieinamas šiuo interneto adresu: thingsee.com

Malti: B'dan, Haltian Products Oy. niddikjara li dan it-tip ta' tagħmir tar-radju Thingsee TAG huwa konformi mad-Direttiva 2014/53/UE. It-test kollu tad-dikjarazzjoni ta' konformita tal-UE huwa disponibbli f'dan l-indirizz tal-Internet li ġej: thingsee.com

Slovenčina: Haltian Products Oy. týmto vyhlasuje, že rádiové zariadenie typu Thingsee TAG je v súlade so smernicou 2014/53/EÚ. Úplné EÚ vyhlásenie o zhode je k dispozícii na tejto internetovej adrese: thingsee.com

Slovenščina: Haltian Products Oy. potrjuje, da je tip radijske opreme Thingsee TAG skladen z Direktivo 2014/53/EU. Celotno besedilo izjave EU o skladnosti je na voljo na naslednjem spletnem naslovu: thingsee.com

Romană: Prin prezenta, Haltian Products Oy. declară că tipul de echipamente radio Thingsee TAG este în conformitate cu Directiva 2014/53/UE. Textul integral al declarației UE de conformitate este disponibil la următoarea adresă internet: thingsee.com

български: С настоящото Haltian Products Oy. декларира, че този тип радиосъоръжение Thingsee TAG е в съответствие с Директива 2014/53/ЕС. Цялостният текст на ЕС декларацията за съответствие може да се намери на следния интернет адрес: thingsee.com

Polski: Haltian Products Oy. niniejszym oświadcza, że typ urządzenia radiowego

Thingsee TAG jest zgodny z dyrektywą 2014/53/UE. Pełny tekst deklaracji zgodności UE jest dostępny pod następującym adresem internetowym: thingsee.com

Norsk: Herved Haltian Products Oy. erklærer at radioutstyr type Thingsee TAG er i samsvar med direktiv 2014/53/EU. Den fullstendige teksten i EU-samsvarserklæringen er tilgjengelig på følgende internettadresse: thingsee.com

Islenska: Hér með Haltian Products Oy. lýsir yfir að tegund þráðlausan búnað Thingsee TAG er í samræmi við tilskipun 2014/53/ESB. The fullur texti af ESB-samræmisýfirlýsingu er í boði á eftirfarandi veffangi: thingsee.com

Hrvatski: Haltian Products Oy. ovime izjavlja da je radijska oprema tipa Thingsee TAG u skladu s Direktivom 2014/53/EU. Cjeloviti tekst EU izjave o sukladnosti dostupan je na sljedećoj internetskoj adresi: thingsee.com

Turk: Burada, Haltian Products Oy. radyo ekipmanı türünün Thingsee TAG 2014/53/EU direktiflerine uyumlu olduğunu beyan eder. Uyumu beyanının tam metni belirtilen internet sitesinde mevcuttur: thingsee.com

FCC REQUIREMENTS FOR OPERATION IN THE UNITED STATES

FCC Information to User

This product does not contain any user serviceable components and is to be used with approved, internal antennas only. Any product changes or modifications will invalidate all applicable regulatory certifications and approvals.

FCC Guidelines for Human Exposure

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Federal Communications Commission Statement

This device complies with Part 15 Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.

FCC Radio Frequency Interference Warnings & Instructions

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This

equipment uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following methods:

- Increase the separation between the equipment and the receiver.
- Connect the equipment into an electrical outlet on a circuit different from that which the radio receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

FCC Caution

- Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.
- This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Canadian Department of Communications Radio Interference Regulations

EQUIPMENT SPECIFICATION

RF Interface:

- Frequency range: 2402 – 2483 MHz
- Max RF output power: +4 dBm
- Type of antenna: PWB strip line (IFA)
- Ant. frequency band: 2402 – 2483 MHz
- Antenna gain: -1.0 dBi

PRODUCT AND SAFETY INFORMATION

- Thingsee TAG is intended for capturing specified motion and environment data. Use the device for its intended use only.
 - For optimal performance do not operate the device below -20°C and above +60°C
 - Failure to comply with the instructions may cause damage to the device.
 - The socket-outlet for the power source shall be installed near the equipment and shall be easily accessible.
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Separate collection of electrical and electronic equipment and separate packaging materials.
Do not dispose. Return to dedicated collection points.

Manufacturer name and address:

- Haltian Products Oy Yrttpellontie 1 D 90230 Oulu FINLAND