### LEAK USER INSTRUCTIONS

#### 1. INTENDED USE OF LEAK

LEAK is a sensor device to detect water leakage. The device reports the resistance value between the detecting pins and sends this information to a Wirepas protocol mesh network. The device has also sensors for temperature, ambient light, magnetism and acceleration and it includes an LED for indication purposes. It has also sensors for humidity and air pressure but this data is not useful because of the closed structure of the device. Typically LEAK is used together with MTXH Thingsee Gateway in use cases where the measurements are performed in several locations and this data is wirelessly collected and sent via 2G cellular connection to a data server / cloud.

#### 2. GENERAL

The device covers are ultra sonic welded together to get a robust structure against moisture and dust. Batteries cannot be changed.

When delivered, the device is in a very low current consumption mode. When taken into use, it needs to be switched on with a magnet switch tool:

Before installation, the sensor is in low power mode and the LED indicator on the sensor blinks dimly every second. Note that with white device casing, the LED blinking is difficult to see.

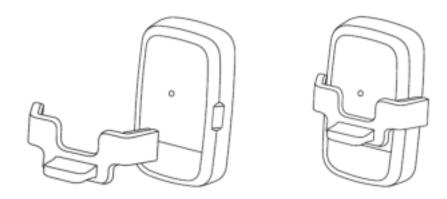


Sensor is switched on with the magnet switch tool by holding it against the sensor's magnetic switch.



Hold the magnet switch tool against the sensor (see the pic) until the LED indicator starts to blink brightly for one minute.

When the LED goes off, the sensor is ready for use.



Once the device is switched on, it wakes up and starts scanning for nearby Wirepas devices having the same network ID.

### 3. PRECAUTIONS

Operating temperature range for the device is -20...+50 °C due to battery specifications.

#### 4. LEGAL NOTICES

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

The full text of the EU declaration of conformity is available at the following internet address: https://haltian.com

Haltian Products Oy vakuuttaa, etta radiolaitetyyppi LEAK on direktiivin 2014/53/EU mukainen.

EU-vaatimustenmukaisuusvakuutuksen täysimittainen teksti on saatavilla seuraavassa internetosoitteessa: https://haltian.com

LEAK operates at Bluetooth® 2.4 GHz frequency band. Maximum radio-frequency power transmitted is +4.0 dBm.

Manufacturer name and address:

Haltian Products Oy

Yrttipellontie 1 D

90230 Oulu

Finland



# FCC REQUIREMENTS FOR OPERATION IN THE UNITED STATES

#### FCC Information for the User

This product does not contain any user serviceable components and is to be used with approved, internal antennas only. Any product changes of 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 equipment should be installed and operated with minimum distance of 10 mm between the radiator and your body. 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 and 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.

### Industry Canada:

This device complies with RSS-247 of the Industry Canada 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.

Ce dispositif est conforme à la nor me RSS-247 d'Industrie Canada applicable aux appareils radio exempts de licence. Son fonctionnement est sujet aux deux conditions suivantes: (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable

# **Radiation Exposure Statement:**

This device complies with ISED radiation exposure limits set forth for an uncontrolled environment.

NOTE IMPORTANTE: Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements ISED établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec une distance minimale de 10 mm entre le radiateur et votre corps.

FCC ID: 2AEU3TSLEAK IC ID: 20236-TSLEAK