StreamLine

4888 StreamLine LoRa BLE WiFi Security Tag with Tamper Strip

See indication of scale below

For assets exposed to the elements, the 4888 StreamLine LoRa BLE WiFi Security Tag with Tamper Strip is the ideal choice. Its fully sealed enclosure ensures protection while providing orientation data through encrypted LoRa signals. Thanks to its tamper detection strip it can alert the user if the device is removed from the surface it is attached to from the first moment of installing. Additionally, it forwards local WiFi signals for positioning when needed. This versatile module also includes FSK and BLE beacon technology for comprehensive location tracking. The 4888 StreamLine LoRa BLE WiFi Security Tag with Tamper Strip is your solution for asset tracking in challenging conditions.

Key features

General

- Tamper detection strip
- Small size: 57 x 30 x 15 mm
- Lightweight: only 40 grams
- Sealed enclosure offering IP68 protection
- Wide operating range: -20˚C … +60˚C
- Multiple watchdog levels for maximum stability
- Event based free configurable module to fit any job
- Remote configurable to fit any job (both firmware and configuration files can be updated/patched over-the-air)
- Supports integration into third party networks
- RC1, Europe and Middle East, 868 MHz

Optional extras

- Eddystone integrations
- Sigfox

Connectivity

- LoRa technology, EU-868 MHz
- Compatible lora based solutions such as: private LoRa networks or Helium
- Bluetooth beacon technology
- FSK
- RF
- NFC

Positioning

- Supported by StreamLine Scanners
- WiFi sniffing

Sensors

- 3D accelerometer up to 16 g

Electrical

- 700 mAh battery capacity

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Product summary

The 4888 StreamLine Security Tag with Tamper Strip is a fully sealed module capable of tracking any asset. The module is fully potted in Polyurethane (EH-E83) inside of it's Polyamide (PA6) container. These materials protect the module against the ingress of water and offering resistance to temperature, impacts and abrasion. The module can optionally be delivered with ATEX certification.

Using beacon technology, the module can be used to track assets accurately. the user can set up areas for the module to recognise and forward the identifier of the beacon it is located nearby. Providing a very accurate position.

This version of the Security Tag is equipped with a tamper detection strip. If the module would be removed from the surface it is attached to it can enter a user defined alarm mode. The alarm mode may for instance be an increase in the time between location messages and a local signal which can be picked up by a StreamLine Scanner.
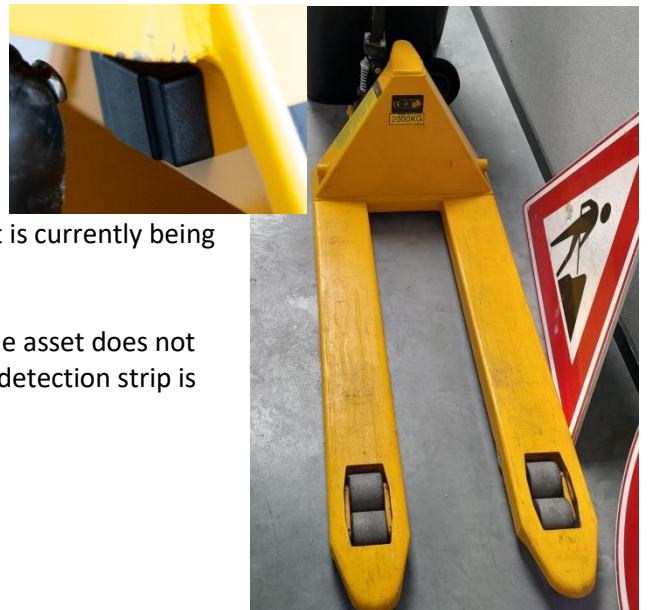
When ordered in large volumes, the module can be customised to specifications, e.g. adding or removing components. From only the PCBA up to a full solution (with enclosure, settings, special firmware, etc.), please contact your StreamLine products supplier for your project.

Example use case

Asset tracking

Using the beacon functionality, the 4888 StreamLine LoRa BLE WiFi Security Tag With Tamper Strip can be used to keep track of the part of a facility an asset is in using a minimal amount of energy. Furthermore, the built-in accelerometre can provide updates on if the asset is currently being used even outside of the reach of any beacons.

The module can be set to send out more LoRa signals if the asset does not detect any of the beacons in the facility. Or if the tamper detection strip is broken.

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Connectivity specifications

- LoRa and FSK
  - Semtech LR1110
    - Frequency: EU 868 MHz
    - Protocol: LoRaWAN 1.0.2 and custom LoRa protocol, optional Sigfox
    - Transmitting power: Up to +15 dBm
    - Sensitivity: -137 dBm
- BLE (RF 2.4GHz)
  - Nordic nRF
    - Protocol: BLE 5.3 and custom 2,4 GHz
    - Transmitting power: Up to +20 dBm with on board amplifier
    - Sensitivity: -96 dBm (BLE)

Sensors

- Accelerometer
  - Sensitivity: light vibrations of 0,016 g up to movements of 16 g
  - Sensitivity can be adjusted over-the-air

Operating temperature

Battery operating range: -20°C … +60°C

Electrical

Standard Li-MnO2 rated voltage +3 VDC
Nominal capacity 700 mAh
Lasts up to seven years depending on settings

Optional extras:

- 4888N
  - Version of this module without tamper detection strip
  - May be ordered with ATEX certification
  - Click here to view this product on our site

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Indication of scale

Size: 57 x 30 x 15 mm

About StreamLine IoT BV

StreamLine IoT BV is part of a group of companies active in the industry of track & trace module, IoT solutions and internet portal services since 1995.

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