

# Universal beacons

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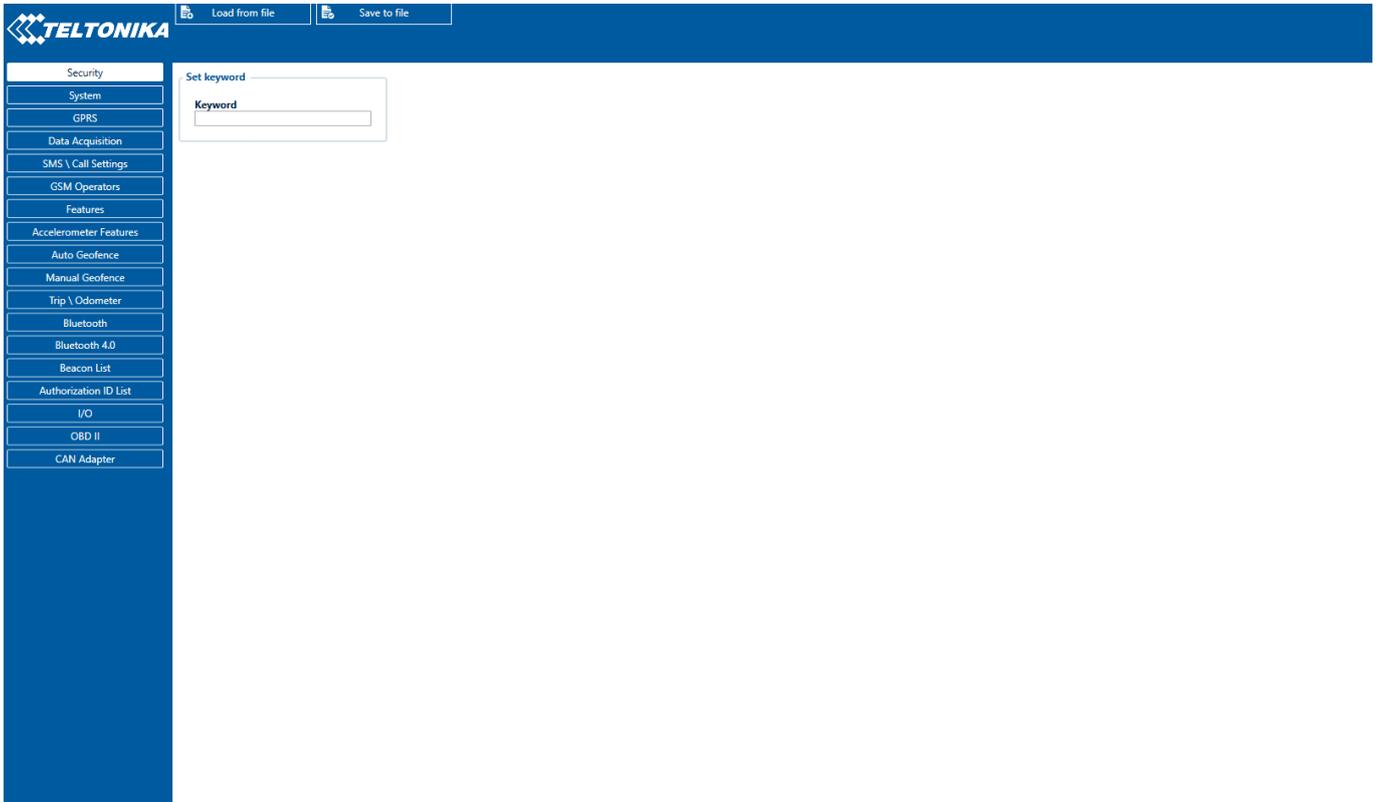
## General description

This chapter includes full functionality description. Beacons capturing has two modes: **Simple** and **Advanced**. When simple mode is selected beacon parsing is done automatically (Eddystone and iBeacon protocols are supported). When advanced beacon mode is selected, beacon data capturing can be configured.

## Simple beacon mode

Beacon are sent to server in a variable length Beacon IO (**Teltonika data transfer ID 385**).

Beacon records are generated according to Beacon Record parameter. When Eventual mode is used, record is generated when BLE scan finishes. This mode does not work with **non stop scan, as it never finishes scanning procedure**. When Periodic mode is selected, beacon records are generated according to Period settings. When there is no visible beacons, empty beacon record will be generated.



## Advanced beacon mode

**Beacon Settings**

**Beacon Settings**

Beacon Detection

Disabled  All

Configured

Beacon mode

Simple  Advanced

Beacon Record

On Change  Periodic

Beacon Record Priority

None  Low

High

**Beacon List**

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In advanced mode device can detect any beacon type as configured in table, for example this configuration is set to detect iBeacon and EddyStone Beacons, also with additional data(in this case whole packet).

Beacons Capturing Configuration							
Name	Manufacturer ID	Manufacturer ID Offset	Manufacturer ID Size	Beacon ID Offset	Beacon ID Size	Additional Data Offset	Additional Data Size
iBeacon	4C000215	5	4	9	20	0	30
EddyStoneID	AAFE0000	9	3	9	16	0	31

Beacon are sent to server in a new variable length Beacon IO (AVL ID 548) (**Different from Simple mode!**).

Beacon ID source can be selected.

- When Beacon ID is used, source is used as configured in Beacon ID offset and Beacon ID size columns.
- When Beacon MAC address is selected, Beacon ID will be replaced with MAC address. IO structure remains the same, but Beacon ID size will always be reported as 0x06.

## Universal Beacons and Beacon On Change

Users who had configured Eventual mode records priority, now will have to work with On Change or Periodic mode. Records sending structure is listed as following:

- On change mode - device will not create Beacon record after every scan procedure is completed unless scanned Beacon list will change.
- Periodic - records will be saved according configuration settings.

## Beacon Settings

### Beacon Settings

Beacon Detection

Disabled

All

Configured

Beacon mode

Simple

Advanced

Beacon Record

On Change

Periodic

Beacon Record Priority

None

Low

High

### Beacon List

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<a href="#">Import CSV</a>	
<a href="#">Export CSV</a>	

## Beacon Record Priority

This selection defines what priority generated Beacon record will have, there is an exception for priority „None“ - if selected, no record will be generated. If value “Low” is selected, then Beacon record will be generated and sent once link with the server is established. If value “High” is selected, then Beacon record will be generated and sent immediately. This feature can be used with Beacon On Change or Periodic mode.

## Beacon Settings

### Beacon Settings

Beacon Detection

Disabled

All

Configured

Beacon mode

Simple

Advanced

Beacon Record

On Change

Periodic

Beacon Record Priority

None

Low

High

### Beacon List

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