iBKS Card Beacon Datasheet

ABSTRACT

iBKS Card Beacon Technical Data

AUDIENCE

This document is primarily focused for engineers or other users with a technical profile

FEATURES

- Advertising **Beacon** Device
- Replaceable batteries
- **BLE + NFC + RFID**
- Full **Eddystone** & **iBeacon** compatible
- 100% Configurable Parameters via app (Android & iOS)
- Firmware update **Over The Air** (OTA)
- External button to enable/disable and alarm function
- Logo and color customizable (MOQ)
- Provided with your own configuration (MOQ 50 units)
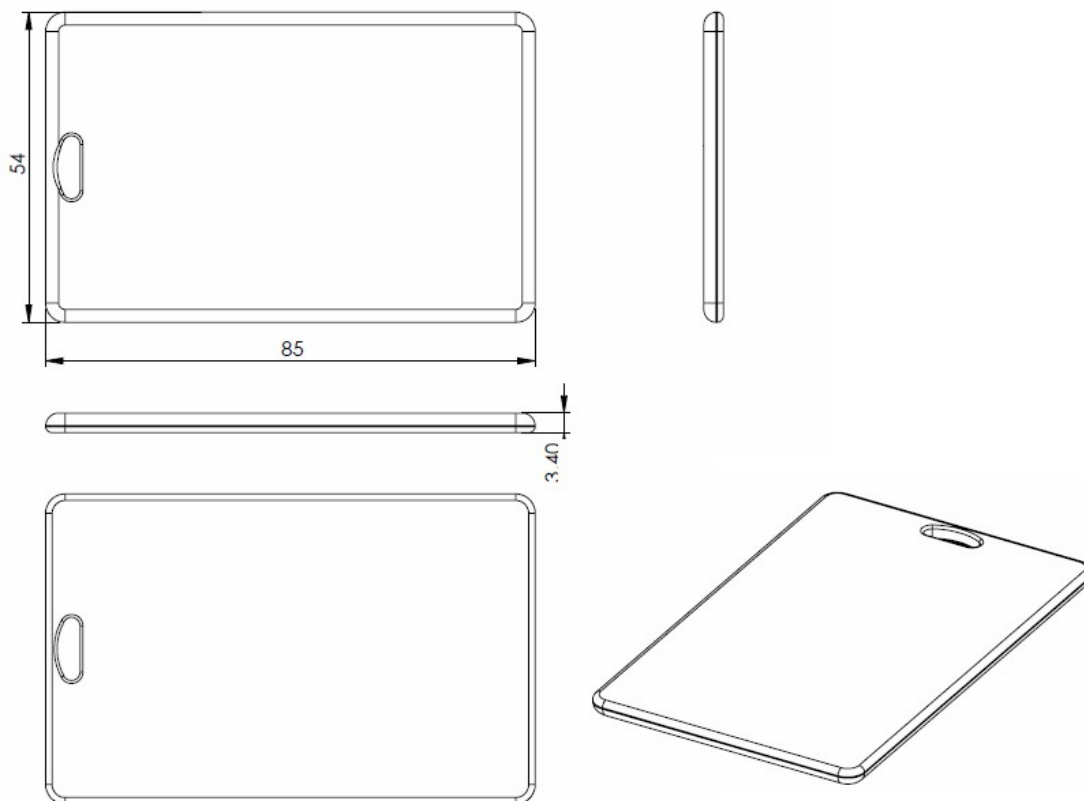- Movement sensor

Revision 2 | May 2019

Table of Contents

1.   Specifications

This section contains electrical, mechanical and software specifications for iBKS Card Beacon

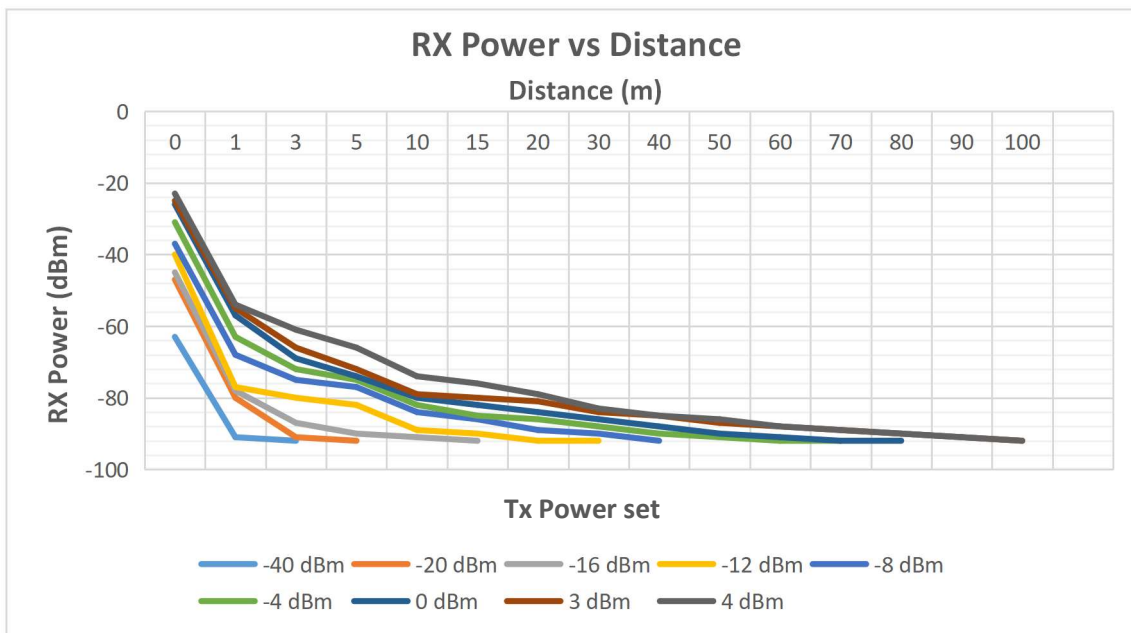|			
Dimensions (mm)	54 x 85 x 3.4	**Sensors**	Accelerometer
Weight	22g	**Idle Current Consumption**	3.4µA
Core	Nordic nRF52832	**Case material**	Policarbonate
Radio Protocol	Bluetooth® Low Energy	**Case finish**	Matte white
BLE Distance Range	Up to 100m	**Operating Temperature**	-30 to +60ºC
RFID	Read Only Frequency 125kHz	**Storage Temperature**	0 to +35ºC
NFC	Read Only Type - 2	**Beacon Protocols**	iBeacon Eddystone: UID, URL, TLM & EID
Battery	4 x Coin Cell CR2016 3V – 360mAh	**Firmware Update**	OTA (Over The Air)

2.   iBKS Card Beacon Mechanical Draws

All dimensions in mm

3. RX Power (dBm) vs Distance

The following table and graph show the RX power received (dBm) in comparison with distance (m) for all configurable TX powers.

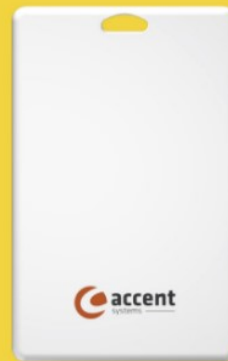| Distance(m)	TX Power (dBm)								
	-40	-20	-16	-12	-8	-4	0	+3	+4
0	-63	-47	-45	-40	-37	-31	-26	-25	-23
1	-91	-80	-78	-77	-68	-63	-57	-55	-54
3	-92	-91	-87	-80	-75	-72	-69	-66	-61
5		-92	-90	-82	-77	-75	-74	-72	-66
10			-91	-89	-84	-82	-80	-79	-74
15			-92	-90	-86	-85	-82	-80	-76
20				-92	-89	-86	-84	-81	-79
30				-92	-90	-88	-86	-84	-83
40					-92	-90	-88	-85	-85
50						-91	-89	-87	-86
60						-92	-90	-88	-88
70						-92	-91	-89	-89
80							-92	-90	-90
90								-91	-91
100								-92	-92

IMPORTANT:

This chapter applies from firmware version EDSTEID52 V2.2018.04.03.0 onwards.

Notice all values shown in this chapter have been tested in an open field of a city. Depending on the environment where the iBKS Card is placed, these values might differ.

Revision History

The following revision history table summarizes changes contained in this document.

Revision Number	Revision Date	Description of Changes
Rev 0	03/2018	Initial Release
Rev 1	09/2018	⟡ Standard version discontinued ⟡ Added RX Power vs Distance
Rev 2	05/2019	⟡ Card Beacon weight updated

www.accent-systems.com

WHERE TO FIND US

Barcelona
Terra Alta, 1-3 (Pol. Ind. Can Carner)
08211 Castellar del Vallès
Barcelona - Spain
Telf: (+34) 93.512.51.38

New York
1460 Broadway
New York, NY 10036, USA

SOCIAL