

iBKS USB Datasheet



ABSTRACT

iBKS USB Technical Data

AUDIENCE

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

FEATURES

- Advertising **Beacon** Device
- **Bluetooth Low Energy**®
- Full **Eddystone** & **iBeacon** compatible
- 100% Configurable Parameters
- USB Serial Communication
- Firmware update **Over The Air** (OTA)
- Logo and color customizable (MOQ)
- Provided with your own configuration (MOQ 50 units)
- No tools needed for maintenance
- Additional optional sensors available

Revision 1 | August 2016

Table of Contents

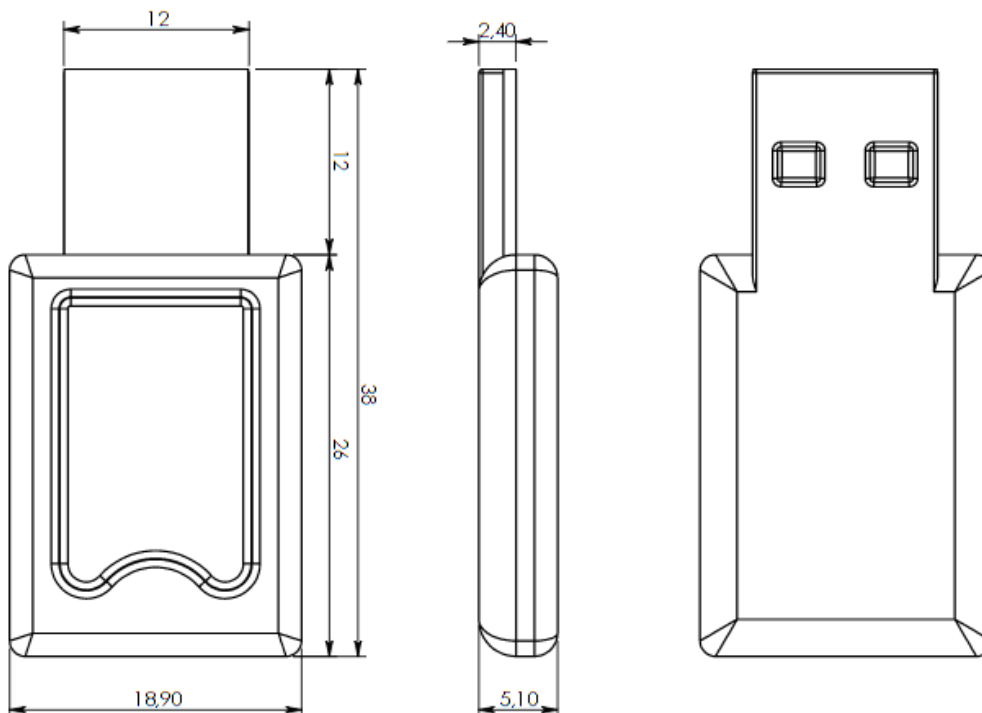
1. Specifications	2
2. iBKS USB Mechanical Draws	2
3. RX Power (dBm) vs Distance	3
Revision History	4

1. Specifications

This section contains electrical, mechanical and software specifications for iBKS USB

Dimensions	38 x 18.9 x 5.1 mm	Case material	ABS
Weight	3g	Case finish	Matte white
Core	Nordic nRF51822	Fixing method	USB connector
Radio Protocol	Bluetooth® Low Energy	Operating Temperature	-25 to +75°C
Distance Range	Up to 100m	Storage Temperature	-40 to +125°C
Power Supply	USB 5V	Beacon Protocols	iBeacon Eddystone: UID, URL, TLM & EID
Optional Sensors	Temperature	Firmware Update	OTA (Over The Air)

2. iBKS USB Mechanical Draws

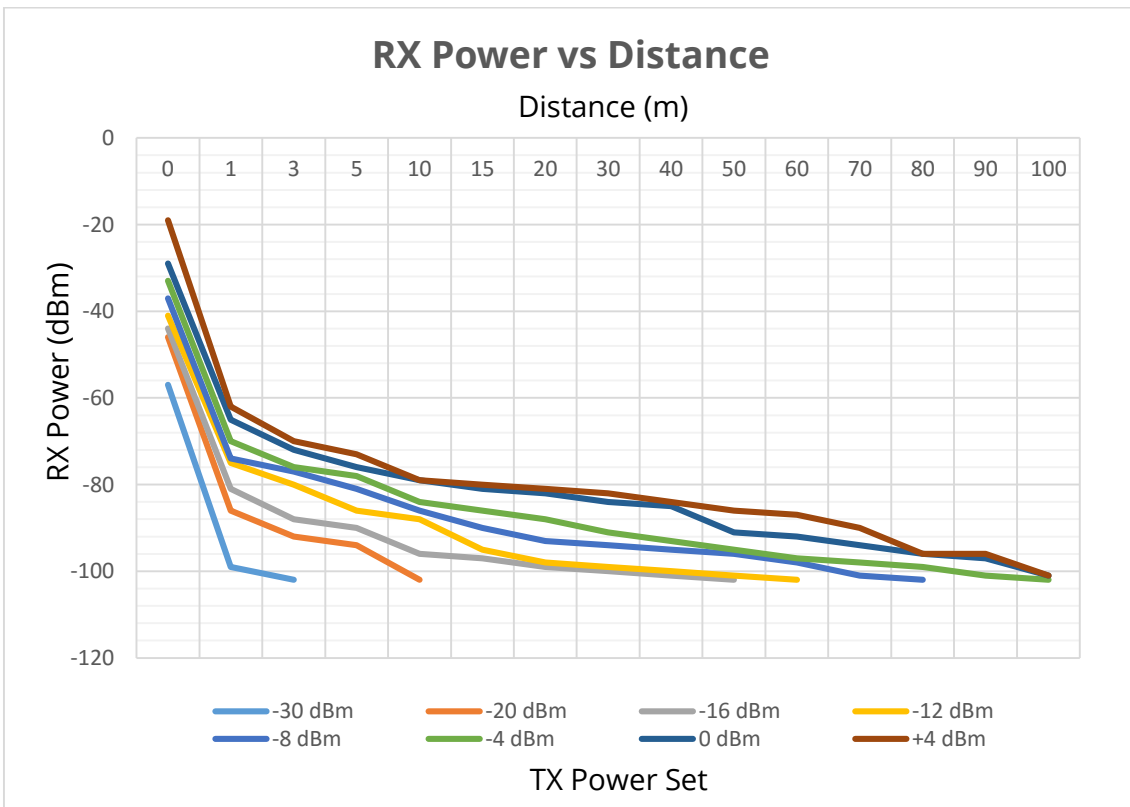


All dimensions in mm

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)							
	-30	-20	-16	-12	-8	-4	0	+4
0	-57	-46	-44	-41	-37	-33	-29	-19
1	-99	-86	-81	-75	-74	-70	-65	-62
3	-102	-92	-88	-80	-77	-76	-72	-70
5		-94	-90	-86	-81	-78	-76	-73
10		-102	-96	-88	-86	-84	-79	-79
15			-97	-95	-90	-86	-81	-80
20			-99	-98	-93	-88	-82	-81
30			-100	-99	-94	-91	-84	-82
40			-101	-100	-95	-93	-85	-84
50			-102	-101	-96	-95	-91	-86
60				-102	-98	-97	-92	-87
70					-101	-98	-94	-90
80					-102	-99	-96	-96
90						-101	-97	-96
100						-102	-101	-101



IMPORTANT:

This chapter applies from firmware version EDSTEID V5.2016.06.29.1 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 USB 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	10/2015	Initial Release
Rev 1	08/2016	<ul style="list-style-type: none">☞ Design changed☞ Specifications updated☞ Added mechanical draws☞ Added RX Power vs Distance



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