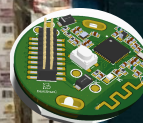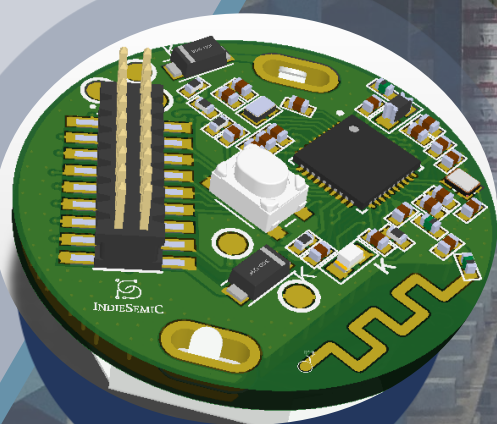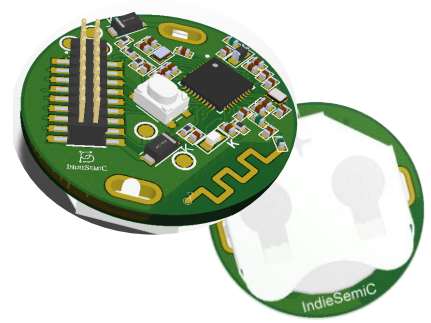# IndieSemic

ISC-Beacon-V01

ASSET TAG

DATASHEET

PRODUCT OVERVIEW

The ISC-Beacon-V01 is a portable Bluetooth® LE positioning tag developed by Indiesemic mainlyfor asset management. It is slick and slim which can be flexibly installed on various assets. While capable of broadcasting up to 85 m, it is perfectly suitable for asset management in museums, warehouses, exhibitions, and commercial complexes.

KEY FEATURES

Cost-effective

85 m broadcast transmission distance

Dual-channel broadcast

Easy installation, replaceable battery

Portable design

MARKET APPLICATIONS

Asset Management

The ISC-Beacon-V01 is lightweight, and cost-effective that is ideal to be deployed inscenarios, such as warehouses, logistic transportation and museums. Customers can determine the location and vacancy status of various assets in venues along with related technologies, to achieve efficiency and balance resource management.

Note: Application cases above are only as a reference, more applications realized are based on users' software algorithm ability.

PRODUCT SPECIFICATIONS

BASIC SPECIFICATIONS

Material	PCB FR4 or Enclosure ABS
Color	TBD
Size (diameter)	26 mm
Weight	6 g (battery included)
Battery type	1 CR battery
Battery capacity	230 mAh
Battery life	6month to 8 months (based on the SDK used)
Sensor	TBD
LED	Low Power LED Indication
Button	Can be configured to wake up or reset the device
OTA	Not supported
Information view app	nRF Connect for Mobile

TECHNICAL SPECIFICATION

Bluetooth® version	Bluetooth® LE 5.4
Broadcast power	-20 to +8 dBm TX power, configurable in 4 dB steps
Broadcast interval	100 ms~10 s，default 2000 ms
Broadcast distance	85 m (open space)
Working temperature	-20℃ ~ 60℃
Storing temperature	20℃ ~ 35℃
Security	Non-connectable mode, data cannot be altered (AES Encryption)

BROADCAST SPECIFICATIONS

Type / channel	Item	Default settings
iBeacon (Activated by default)	UUID (16 bytes)	1A957D0F-78C2-4C95-BFDF-BF483E7B67AC (configurable)
	Major (2 bytes)	0 (0 - 65535, configurable)
	Minor (2 bytes)	0 (0 - 65535, configurable)
	Measured power	-59 dBm (0xC5)
	TX power	0 dBm
MBeacon INFO (Activated by default)	Interval (ms)	2000 ms
	Battery Voltage(mV)	Default Setting
	MAC address	Assigned before shipment.
	TX power	0 dBm
	Interval (ms)	4000 ms

Note: ①The product only supports 2 broadcast frames, which can be selected from iBeacon, MBeacon INFO, UID, URL, and TLM, and the broadcast power must be consistent.
②The parameters of the finished product need to be determined at the time of production. Once programmed into the chip, the parameters cannot be modified.

SUPPORT SYSTEMS   SUPPORTED MODELS

iOS 10.0 and above	iPhone6 /6 Plus /6S/ 6S Plus /7 /7 Plus /8 /8 Plus /x /xr /xs /xs max /SE /SE2 / 11 /11 pro /11 pro max, etc.
Android 4.3 and above	LG, Samsung, Xiaomi, Huawei, Honor, OnePlus, Google Pixel, etc.

DEVICE OPERATIONS

Power on
Unplug the insulating sheet, and the device starts to work.

Shutdown
Remove the battery.

Battery check
TBD.

Broadcast viewing
Check whether the device is broadcasting or not by nRF connect App.

PRECAUTIONS

* After the product is powered on, it will be in broadcast mode and cannot be connected.
* All firmware information will be done during the manufacturing stage.
* To extend the battery life if needed, it is recommended to choose a low broadcast power and a long broadcast interval at the manufacturing stage.
* The product might be damaged if using over the normal operating temperature.
* Please avoid direct sunlight for an extended period to avoid aging of the shell when in use.
* Indiesemic will not be responsible for any damage resulting from disassembling manually.

INSTALLATIONS

Double-side adhesive tape

* **Recommended Installation Environment:**
The surface should be smooth and dry, such as ceramic, glass/epoxy resin, acrylic, PBT, ABS, PC, hard PVC.

* **Requirements & Steps:**
Before pasting, the surface should be clean. When pasting, press the beacon with double-sided tapes for 5 seconds and repeat.

* **Common Deployment Scenarios:**
Surface to be installed such as office walls, glass window & door, desk, wood, tile.

Please contact our sales team or technical support team if any deployment questions.