

BESEN

As **BESEN(Beacon + Sensor)** is a wireless device that utilizes the next generation of smartphone via Bluetooth short-range communications technology (BLE), Smartphones, a new concept coupled beacon technology to support the activities ***O2O services** that can be incorporated into tablets, and the Internet of Things.

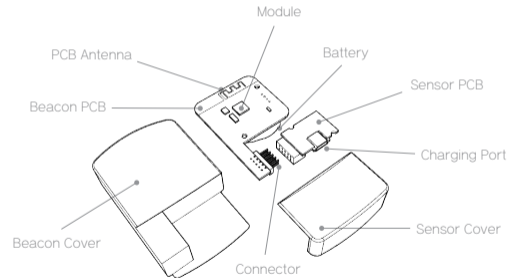
Just off the beacons can be utilized in various fields through a combination of various sensors.

Especially when not in use, the product can be kept separate to reduce the battery life significantly.

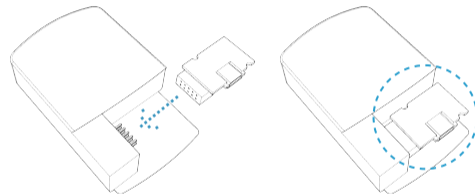
* O2O service?

Connect with marketing online and offline, real-time writing in a specific area
The services that send coupons, etc. on your smartphone.

Components



How to operate



- 01 I would like beacons in the place you want to install.
- 02 Changes to on your Bluetooth status in the menu settings of your smartphone.
- 03 Run the app to monitor the beacon recognized.

Product Specifications

Specification	45mm x 72mm x 20mm
Weight	12g with battery
Processor	32-bit ARM Coretex-M0
battery	CR2450 lithium-ion battery (3v, 620mAh) About two years maximum usage time (Interval 1ms reference)
Operating system	Android 4.3 or later, IOS 7.0 or later
Case	ABS, Rubber
Operating temperature	-10 ~ 60 °C
Features	Waterproof, dustproof
Wireless communication	Bluetooth 4.0
Signal Range	1~70m
Certification	KC, CE, FCC

The sensor module can be combined

Methane, LPG (sensing range: 300 ~ 10000 ppm)
Benzene, toluene, ammonia (detection range: 10 ~ 1000ppm)
Carbon monoxide (sensing range: 10 ~ 500ppm)
Carbon dioxide (sensing range: 450 ~ 2000 ppm)
Volatile Organic Compound (sensing range: 125 ~ 600 ppb)
Vibration sensor
Whole, the humidity sensors
Flame Sensor
Ambient light sensor
Fine dust sensor

※ If you purchased a separate sensor module can be used for various applications.

Please Note

01. Wireless equipment that has the possibility of radio wave interference can not be management is life-saving services.
02. This device is intended primarily for use as a home from home (B grade) EMC devices.
03. This figure may differ from the actual product and are subject to change without notice, product specifications according to manufacturer's conditions.
04. Should you have a cause of poor workmanship If this occurs, we will replace the same product.

Product name: Wireless device for wireless data communication system
Designation: BESEN Model name: ABP-1000
Seller: Aram Solution Country: KOREA



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User Manual

FCC Information to User

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution

Modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC Compliance Information : This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation

IMPORTANT NOTE:

FCC RF Radiation Exposure Statement:

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment.

The antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

CAUTION

To reduce the risk of electric shock, do not remove the top cover (or the rear section).
No user serviceable parts inside, refer servicing to qualified personnel.



This symbol, wherever it appears, alerts you to the presence of uninsulated dangerous voltage inside the enclosure-voltage that may be sufficient to constitute a risk of shock.



This symbol, wherever it appears, alerts you to the important operating and maintenance instructions in the accompanying literature. Please read the manual.

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this equipment near water.
- 6) Do not use near any heat sources such as radiators, heat resistors, stove, or other equipment that produce heat.

CAUTION
RISK OF EXPLOSION IF BATTERY IS REPLACED
BY AN INCORRECT TYPE.
DISPOSE OF USED BATTERIES ACCORDING
TO THE INSTRUCTIONS

European CE notice to users and product statements

This product is CE marked according to the provisions of the R&TTE Directive(1999/5/EC). Hereby, ARAM Solution Co.,Ltd declares that this product is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

For further information, please contact [http:// www.uaram.co.kr](http://www.uaram.co.kr)

CE1177

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CONTACT INFORMATION

Manufacturer Address : Venture-dong #202, jeonbuk technopark,109, Ballyong-ro, Deokjin-gu, Jeonju-si, Jeollabuk-do, Korea

To locate in-country ARAM SOLUTION CO.,LTD, distributors of the BESEN please refer to the ARAM SOLUTION CO.,LTD Website [http:// www.uaram.co.kr](http://www.uaram.co.kr)

These distributor(s) represent local contacts for this product.

CORPORATE HEADQUARTERS:

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This device complies with Industry Canada license-exempt RSS standard(s).

Operation is Subject to the following two condition: (1) this device may not cause interference ,and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

EUROPEAN UNION “DECLARATION OF CONFORMITY”

DECLARATION OF CONFORMITY

ARAM SOLUTION CO.,LTD

Venture-dong #202, jeonbuk technopark,109, Ballyong-ro, Deokjin-gu, Jeonju-si, Jeollabuk-do, Korea

declare under our sole responsibility that the product(s)

BESEN – ABP-1000

to which this declaration relate(s) is in conformance with the following standards:

EN 301 489-1 V1.9.2:2011

EN 301 489-17 V2.2.1:2012

EN 60950-1:2006/A2:2013

EN 300 328 V1.9.1:2015

following the provisions of the 1999/5/EC Directives.