Tall Tent

RONGMAI

RBT-007

General Description

RBT-007 is a Bluetooth Low-Energy proximity beacon with integrated accelerometer for attachment to objects that move. RBT-007 advertises ID data that is compatible with common beacon standards (UUID, Major ID, and Minor
ID), ONLY when an object is moving, or ONLY after an object has fallen. There is also a mode to display accelerometer data and gesture counts.

Similar to RBT-007 is part of the **coin-cell** family of beacons which come in a small, weatherproof enclosure, using a standard coin-cell battery, or as a PCB panel. A push-button with LED feedback allows the user to select the right operating mode for their deployment.
RBT-007 operating modes offer tradeoffs between different functional modes.

EMBC02 is shipped pre-programmed with several operating modes:

- **Sleep Mode** with over 7 years of shelf life typical
- **Sensor Mode** offers 1s beacon interval, 60m range line-of-sight (LOS), and 4.5 months of battery life typical while displaying raw accelerometer data and a tap counter.
- **Moving Mode** offers 100ms beacon interval, 30m range, and consumes an average of 275 µA when beaconing and 6 µA while idling. The device only beacons when movement is detected and one minute after the device is still
- **Fall Mode** offers 100ms beacon interval, 120m range, and consumes an average of 350 µA when beaconing and 13 µA while idling. The device only beacons after a fall has occurred and 10 minutes after the event

Any mode can be locked for final deployment

RBT-007 can be delivered in any quantity with guaranteed unique ID numbers. A unique serial number is printed on the label and encoded in a QR code for optical scanning.

RBT-007 firmware can be customized for individual deployments with the Proximity Beacon Development Kit. Custom parameters include UID, power level, beacon interval, state-machine, gesture alarm mode, gesture threshold, and accelerometer data and settings. Gestures include: any movement, no movement, taps, falls, and shocks.

EMBC02 is FCC, IC, and CE certified, RoHS, Reach, and halogen free compliant.

Features

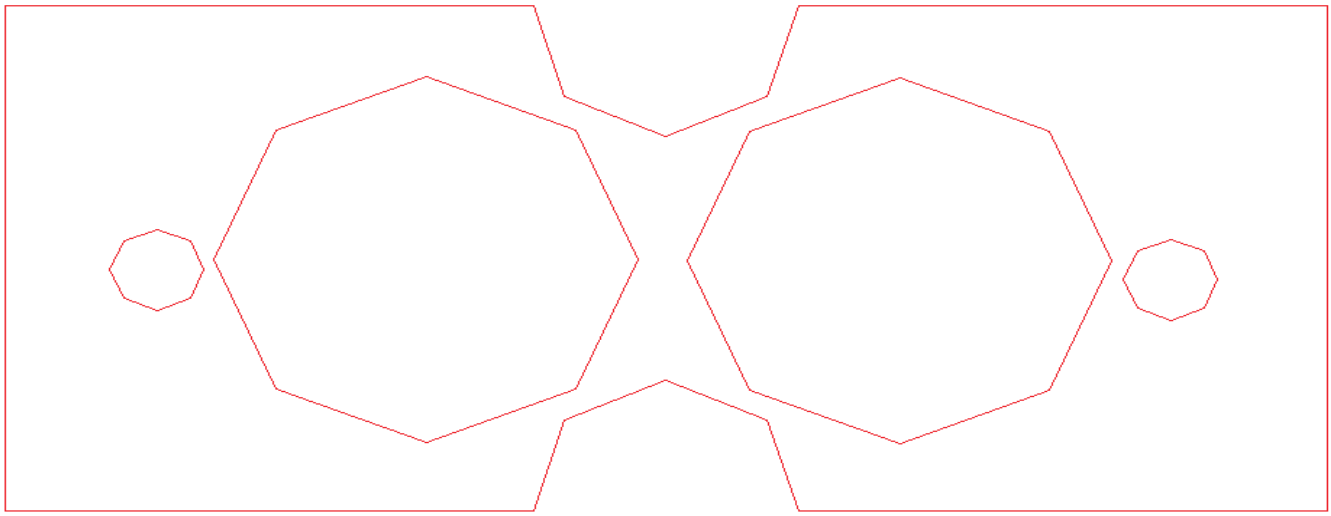
- **Weatherproof Enclosure**
  - IP-64 rating, -20C to +60C operating range
  - Size: 30mm x 10mm disk; Weight: 7 grams
  - Replaceable CR2032 3V Li battery
  - Integrated push-button with LED indicators
  - PCB-only format also available
- **Accessories**
  - Wall-mount
  - Key-fob
  - Wrist-band
- **Selectable ID Mode beaconing**
  - ID packet format includes:
    - UUID, Major ID, and Minor ID
    - Output power information
  - Sensor Mode: 60m LOS, 1s beacon interval, with tap counter
  - Moving Mode: 30m LOS, 100ms beacon interval, 1 minute broadcast period after movement is detected
  - Fall Mode: 120m LOS, 100ms beacon interval, 10 minute broadcast period after a fall is detected
- **Unique Identification**
  - UUID:
    - 699EBC80-E1F3-11E3-9A0F-0CF3EE3BC012
  - Unique Major and Minor IDs (serialized)
  - Unique Serial Number
  - Serial number, Major/Minor ID embedded in QR Code for deployment

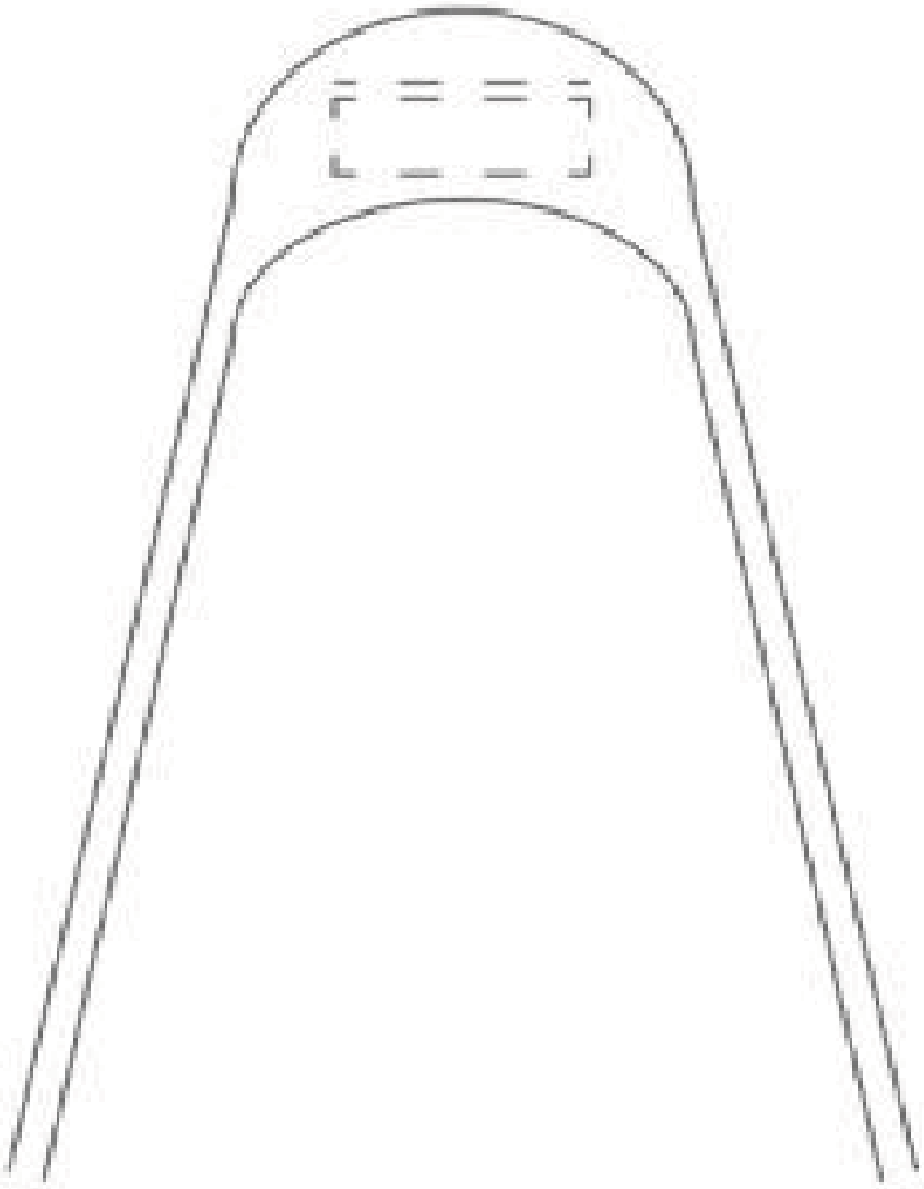
"EMBC Finder" Smart Device App

- iOS App available on App Store
  - iPhone® 4S and above
  - iPad® 3 and above (Mini, Air, etc.)
- Android App available on Google Play™
  - 4.3 and newer devices

Applications

- Inventory tracking
- Electronic Leash Applications
- Activity monitoring





FCC Information and Copyright

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 or more 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.

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.

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

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment . This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

IC WARNING

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:
(1) This device may not cause interference.
(2) This device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil contient des émetteurs / récepteurs exemptés de licence conformes aux RSS (RSS) d'Innovation, Sciences et Développement économique Canada. Le fonctionnement est soumis aux deux conditions suivantes :
(1) Cet appareil ne doit pas causer d'interférences.
(2) Cet appareil doit accepter toutes les interférences, y compris celles susceptibles de provoquer un fonctionnement indésirable de l'appareil.