

## Baby Tag Instruction Manual and Spec-Sheet

### FCC Compliance

#### The FCC Wants You to Know

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 tuning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

#### **FCC Warning**

Modifications not expressly approved by manufacturer could void the user authority to operate the equipment under FCC rules.

#### **15.9 (a) Labeling Requirements**

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.

## IR and RF Baby Tag

P/N: BKB00001 (433.92 MHz)  
Firmware ver2



**Baby Tag**

### **Description**

A small tag, attachable to a baby's ankle, capable of transmitting Infra Red signals in addition to RF signals in the frequency of 433.92 MHz. The tag is used for security monitoring (abduction and mismatch prevention) of infants whereabouts in real time, in hospitals' Maternity Wards. The tag sends a unique message when the ankle band has been tampered with and disconnected.

Recommended use is with the ELPAS BabyWatch system.

### **General**

<b>Electrical power source</b>	One 3-Volt lithium battery
<b>Battery type</b>	CR 2032 Renata
<b>Transmission rate</b>	A. Every 10 seconds (IR and RF), when the tag is in operation mode - i.e. affixed to a baby. B. Every 60 seconds (IR and RF), when the tag is not affixed to a baby, and is motionless. C. Immediately after tampering, or after affixing to a baby a IR message is transmitted
<b>Battery life</b>	In regular use, battery life will be approximately nine month
<b>LED indicator on badge</b>	Activated with every message
<b>Tag ID</b>	Unique factory-programmed
<b>Data rate</b>	19,200 bits per second
<b>Message protocol</b>	4 bytes proprietary format
<b>Message duration</b>	2.08 ms
<b>Dimensions</b>	39.4 x 31.5 x 14.8 mm

<b>Tag re-usability</b>	After each use, the baby tag needs to be cleaned and prepared for next use using the Baby Tag disposable kit's contents. The tag can be re-used up to 100 times (this is solely because of connector restrictions).
<b>Tag's Disposable components</b>	<ul style="list-style-type: none"> <li>• Light green snap-on cover</li> <li>• Disposable band</li> <li>• White connector</li> <li>• Assembly set</li> <li>• Insulator</li> <li>• Sticker</li> </ul>
<b>Weight (when assembled)</b>	20 gram
<b>Temperature: Operating</b>	-10 to 70°C
<b>Temperature: Storage</b>	-20 to 60°C
<b>Water resistance</b>	Waterproof
<b>Accessories</b>	Baby Tag Disposable Kit P/N BKB09001

#### ***IR Transmission***

<b>Peak optical transmitted power</b>	500mW
<b>Peak transmission wavelength</b>	880nm
<b>Peak radiant intensity</b>	120 mW/Sr
<b>Frequency of transmission</b>	Carrier at 455 KHz
<b>Transmission angle</b>	360° badge plane. ±60° to badge perpendicular axis

#### ***RF Transmission***

	<b>433.92 MHz RF</b>
<b>Modulation</b>	ASK (Amplitude Shift Keying of 433.92 MHz carrier)
<b>Average effective radiated power</b>	Less than -70 dbm max
<b>Stability</b>	+/- 20ppm
<b>Peak ERP</b>	-20 dbm (max)
<b>Transmission pattern</b>	Omnidirectional
<b>FCC compliance</b>	FCC Part 15.231
<b>I-ETS</b>	EE 300 220-1

## Using the Baby Tag

The following is a set of procedures to ensure proper use of the Baby Tag.

### ***To use the Baby Tag:***

1. Place the Baby Tag band around the baby's ankle.
2. Gently pull at both loose ends of wire until the strap is well wrapped (but not tightened) around the baby's ankle.
3. Hold the Baby Tag using two fingers of one hand, ensuring that the activating set, comprising of the thumbscrew and hook, is held straight.
4. Close the thumbscrew.
5. Rotate the thumbscrew in a counterclockwise direction, as if closing a water tap, until the lamp on the wall is switched on displaying a green light.
6. Cut excess loose wires.
7. Open the thumbscrew slightly and remove the activating set.
8. Align the wire in the loop on the back of the tag, and snap the tag's cover onto the tag.