

# BluePyc BLE EchoBeacon Family

Bluetooth® Low Energy Beacon Repeater



## How it works

- ❖ Tag Beacons linked to person/item transmit the data with limited power & energy consumption.
- ❖ **EchoBeacon** receives Beacon's data (monitoring area based on Beacons power transmission).
- ❖ EchoBeacons re-transmit the collected Beacon's data to the BLE Gateway, distance up to 100 mt.

## Highlight

- ❖ **Unplug connection.** Micro USB power supply (\*). Desktop, ceiling & wall mount easy installation (\*).
- ❖ **Responsive:** customizable firmware, memory for associated beacons, adjustable parameters, etc...
- ❖ **Interactive:** integrated relè & led, integrated digital inputs, UART interface (\*)
- ❖ **Low cost device** to implement micro localization & track position of people & objects wearing Beacons.
- ❖ **IoT & Active RFID application.** Real Time Location System & Indoor Positioning System (zone method).
- ❖ Some **application scenarios:** vehicle & people access control (also stand alone), home & building management, safety (hospital, construction site, etc...), process automation, asset & facility management, smart city (parking, leisure & tourism, etc...)

(\*) Depending on model

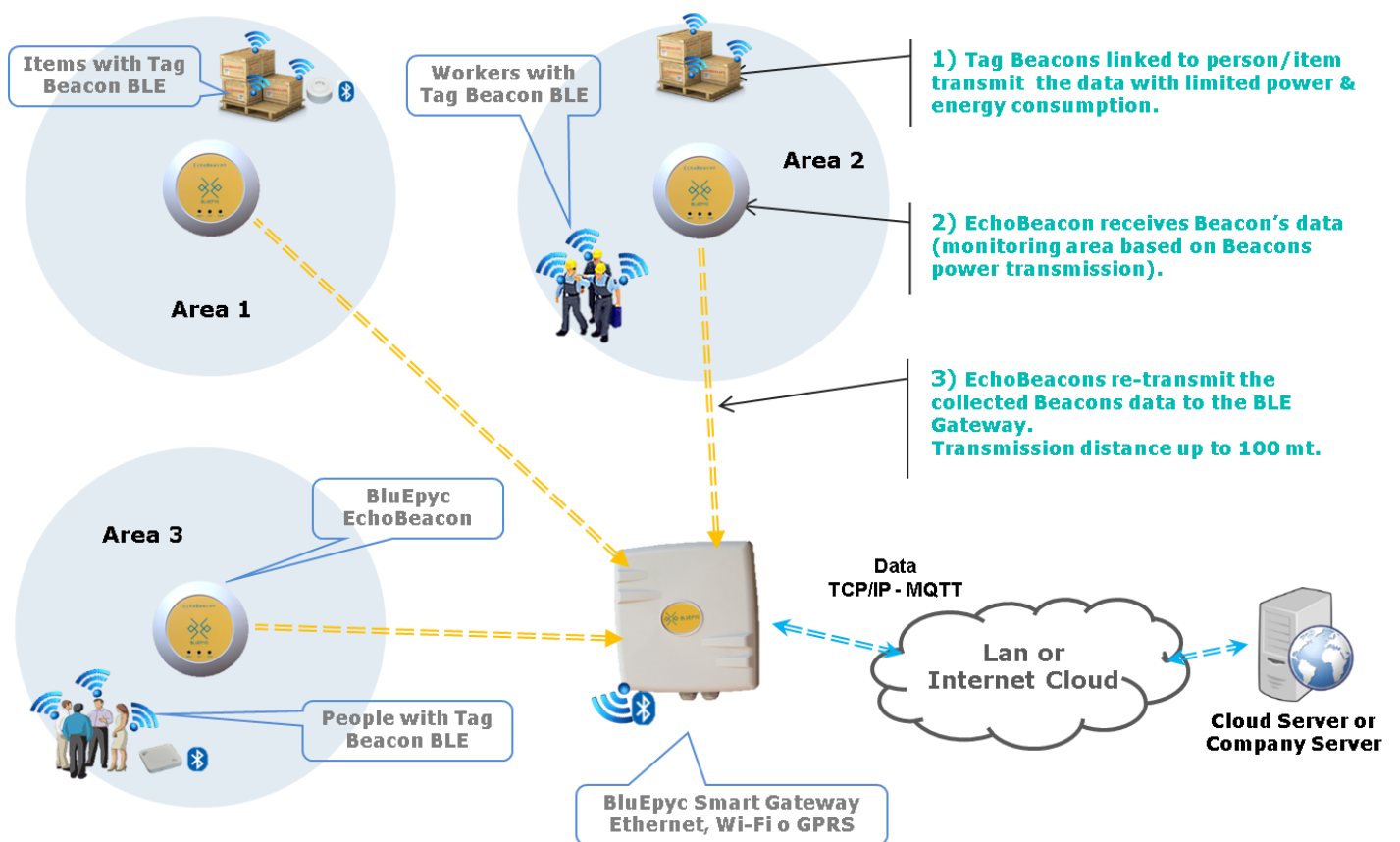
## General Features

## BlueEpyc BLE EchoBeacon Family

- ❖ Operation Frequency: 2,4 GHz. IEEE Standard: 802.15.1 (Bluetooth 4.x Low Energy). Bluetooth integrated antenna.
- ❖ Reading range: depends on the beacon's transmission power and on RSSI filtering.
- ❖ Transmission Range: up to 100 meters (depending on environment & configuration).
- ❖ Input: 3 x Digital Input. Output: 2 x output relè, 3 x Leds. Internal UART interface (\*)
- ❖ Standard Firmware Feature: EchoBeacon ID (2 byte); anti-collision (up to 12 Beacons reading); read Beacons Advertising & RSSI; BLE notification; filtering on beacons mask & RSSI Level, output relé on beacon presence (according to setup and model).
- ❖ Adjustable parameters through BLE service & mobile APP (included): EchoBeacon ID, Reading Time, Transmission Time, Watch Dog Time, filtering parameter (adv mask & RSSI), Transmission Power (16 step), output relé (\*).
- ❖ Possibility of custom applications on-board (on request)

(\*) Depending on model

### EchoBeacon Data Flow



Low cost & unplug device to implement micro localization & change of position of people & objects equipped with Bluetooth Low Energy Beacons. EchoBeacon receives Beacon's data linked to person/item and re-transmit the collected data to the BLE Gateway, distance up to 100 mt.

Responsive to specific application needs: customizable firmware, memory for associated beacons, adjustable parameters.

## BE-EBL-D

### BluePyc BLE EchoBeacon Repeater Light Desktop USB



- ❖ Desktop Indoor Case
- ❖ ABS (UL 94 HB). Protection class IP 30.
- ❖ Dimensions (HxWxD): 93 x 62 x 27 mm.
- ❖ Weight: About 120 g. Colour: Gray with Dark Gray Rubber Sides.
- ❖ Power supply 5 VDC via micro-USB (cable & power supply not included).
- ❖ Temperature range: Operation: -20° C up to 65° C - Storage: -20° C up to 85° C

## BE-EB2-W

### BluePyc BLE EchoBeacon Repeater R2 wall Mount with I/O



- ❖ Indoor Case Wall & Ceiling Mount
- ❖ ABS (UL 94 HB). Protection class IP 40.
- ❖ Dimensions (HxWxD): 110 x 110 x 56 mm.
- ❖ Weight: About 200 g. Colour: White
- ❖ Input: 3 x Digital Input. Output: 2 x output relè, 3 x Leds. Internal UART interface
- ❖ Power Supply 12-24 Volt DC (not included).
- ❖ Temperature range: Operation: -20° C up to 65° C - Storage: -20° C up to 85° C



- ❖ Access control (vehicle & person)
- ❖ Home Automation & Building Management (hospitality, company etc.)
- ❖ Process Automation & Monitoring. Maintenance
- ❖ Safety (e.g. in hospital, construction site)
- ❖ Asset & Facility Management: traceability, positioning, monitoring, sensor management (asset & people)
- ❖ Smart City: transportation, ticketing, waste management, citizen service, parking
- ❖ Tourism and Leisure: museum, exhibition, village & resort, amusement park etc.

