Secure, Versatile and Award Winning Network Radio Devices.

Bluetooth® 4.0 Low Energy Single Mode Sensor

SensorBug™ BR-BUTTON-S2A

OUTLINE

- ***AT HOME. AT WORK. ON THE ROAD. USING BLUETOOTH LOW ENERGY WIRELESS TECHNOLOGY MEANS TOTAL FREEDOM FROM THE CONSTRAINTS AND CLUTTER OF WIRES IN YOUR LIFE.***

- **8 different sensor application modes in one device:**
  - ✓ **Remote Control / Panic Alarm**
  - ✓ **Pedometer**
  - ✓ **Proximity & out of range detection**
  - ✓ **Acceleration, shock, and motion detection ±2g, 12 bit**
  - ✓ **Water detection 16-bit ADC**
  - ✓ **Light sensing 0 – 5000 LUX**
  - ✓ **Temperature sensor -40°C to +85°C (±0.5°C)**

With *n*Blue™ module

- **2-button control, and LED status, CR2032 coin battery included.**
- **Code space for client apps. (130kB Flash / 50kB w/parser, 2.5kB RAM)**
- **Analog, RTC, and battery monitor**
- **Compatibility with *Bluetooth* Low Energy Single & Dual mode devices**
- **Can be placed on a key ring or clip on button for convenient use**
- **Custom build options to populate only required features to reduce overall cost.**

FEATURES

- ***Proven, Reliable Technology:*** 120 meters (400 feet) est. distance line of site (LOS), adjustable range.
- ***Small and Convenient:*** Can be carried with keys in pocket, handbag, clipped on clothing.
- ***Software Adjustable:*** Transmitter power from short to long range applications
- ***Low power consumption:***
- ***Long Battery Life -*** Single 3.0 volt coin battery can support 1 second connection intervals for 1 year and easily replaceable.
- ***Auto deep sleep -*** 0.5uA, 120uS wakeup
- 2-way communication and future options for broadcast
- LED status for connection state, sensor mode, and low battery
- Remote RF configuration

SPECIFICATIONS

- ***Operating Temperature:*** -20~+60ºC.
- ***Dimensions:*** 25.50mm (1.0”) Diameter
- ***Button Enclosure Construction:*** Plastic
- ***Weight:*** 8gm (0.3 oz.)
- ***Security:*** Secure and robust communication link with billions of unique codes
  - ✓ **FHSS (Frequency Hopping Spread Spectrum)**
  - ✓ **24 bit CRC Error correction for guaranteed packet delivery**
  - ✓ **AES-128 encryption using CCM for encryption and authentication of packets.**

Benefits of BLE over traditional *Bluetooth*

IP aware, automatically interacts directly with the web application, phone PC, STB, or gateway is a pass through no special applications required on the Gateway which is a transparent pipe from device to an IP address.

- Broadcast support
- Connectionless always off technology
- Proximity and out of range detection
- 10 msec. connect time and low data latency
- First low power wireless technology standard

Price and Order information

http://www.blueradios.com/orderinfo_new.htm

Bluetooth Low Energy, part of *Bluetooth* Ver. 4.0, specifies two types of implementation: **single** mode and **dual** mode. Single mode chips implement the low energy specification and consume just a fraction of the power of classic *Bluetooth,* allowing the short-range wireless standard to extend to coin cell battery applications for the first time. Dual mode chips combine low energy with the power of classic *Bluetooth* and are likely to become a de facto feature in almost all new *Bluetooth* enabled cellular phones and computers.

Note: Single mode *Bluetooth* 4.0 Low Energy is ***not*** backwards compatible with previous *Bluetooth* standards. Dual mode *Bluetooth* 4.0 Low Energy is backwards compatible but is not practical for low power devices but targeted to gateway products.