Smart Gateway BLE

Bluetooth 5.2 with integrated Antenna

BE-BLEG-R6

BLE BluEpyc **Smart Gateway** IP65
(Ethernet & Wi-Fi)

How it works

- ⚹ Read / Write standard Beacons, Eddystone & iBeacon Tag.
- ⚹ Host Interfaces: Ethernet RJ45 and Wi-Fi
- ⚹ The receiving range is easily set as needed via software
- ⚹ Gateway collects data from Beacons or EchoBeacon repeaters and sends it to the Host (PC).

iBeacon   Eddystone

Highlights

- ⚹ **Compact small size**, easy installation, low cost Bluetooth Gateway Smart Cloud.
- ⚹ **Robust IP65** weatherproof Polycarbonate Enclusure.
- ⚹ **IoT & Active RFID application** for Real Time Location System (zone method).
- ⚹ **Inventory, tracking & tracing** for people, animals & goods, assets, etc
- ⚹ **Clear front cover** for easy monitoring of internal components.
- ⚹ **Application scenarios**: process automation, asset & facility management, real time tracking, vehicle & people access control (also stand alone), home & building management, safety (hospital, construction site, etc), smart city (parking, leisure & tourism, etc) and flexibility for every scenario.

Engineering Services

In addition to this dynamic technology and through our services, we are able and willing to help you in the development of YOUR new and advanced device:

- ⚹ **Technical & Functional Consultancy: Product Specifications Analysis** → we gather all the information, analyze and study the needs of your project, followed by a feasibility study and testing.
- ⚹ **PCB Design: prototypes and final realization** → datasheets analysis, certified components selection and electrical schematic design are the main activities in this phase.
- ⚹ **Firmware Development** → sometimes the same PCB with different firmware can execute different tasks for different applications: in BluEpyc we develop, debug and test your custom firmware.
- ⚹ **Product Release** → once both hardware and firmware of your product have been developed, tested and produced, we deliver you a complete and ready-to-use solution!

Physical Data

Dimension	115 x 90 x 57 mm
Weight	310 g
Case	Material: PC (Polycarbonate) Color: gray base, clear cover for easy monitoring of internal components Waterproof with continuous silicone gasket in the cover
Installation	Wall or ceiling with mounting spacer
IP Rating	IP65
Interfaces	1 x 10/100 Mbps WLAN/LAN variable port 1 x Micro USB port
Power Supply	5V/1A, Micro USB
Indicator LEDs	The BLE LED flashes when a signal is received The Network LED indicates RED when no establishing a network connection The Network LED indicates GREEN when a network connection is established
Temperature Range	Operation: 0°C~40°C. Humidity: 10%~90%

Technical Data

CPU	Low power CPU with System OpenWRT. RAM: 64MB – Flash: 16MB.
Reading Features	Anti-collision Beacons & iBeacons reading
Reading Modes	Read BLE Advertising & RSSI, read/write BLE parameter, filtering on RSSI level, filtering Beacons mask. Dataset: Beacon Advertising, Time, RSSI.
Data Transmission	TCP, MQTT, http with JSON data
Configuration mode	Communication commands documentation Client Application with BluEpyc Start or via On Board Web Server (Internet Browser).
Bluetooth 5.2 Performance	Operating Frequency: 2.4 GHz (2401.0~2483.5 MHz) Frequency offset: +/-20kHz TX Power: 19.5dBm Sensitivity: 92dBm@0.1%BER, 1Mbps E.I.R.P: <10mW (Equivalent Isotopically Radiated Power) Range: 150 meters max, open filed Bandwidth: 2MHz Modulation: GFSK
Wi-Fi Performance	Wireless Security: WPA/WPA2, WEP, TKIP, and AES Working mode: Bridge, AP Client Range: 50 meters max, open field Transmit Power: 17dBm Highest Transmission Rate: 300Mbps Frequency offset: +/- 50kHz Frequency Range: 2412.0~2483.5 MHz E.I.R.P: <100mW (Equivalent Isotopically Radiated Power) Bandwidth:20MHz / 40MHz Modulation: BPSK / QPSK, FHSSCCK / DSSS, 64QAM / OFDM