

BluePyc BLE Gateway Family

Bluetooth® Low Energy Cloud Gateway Reader with
CPU & I/O



Highlight

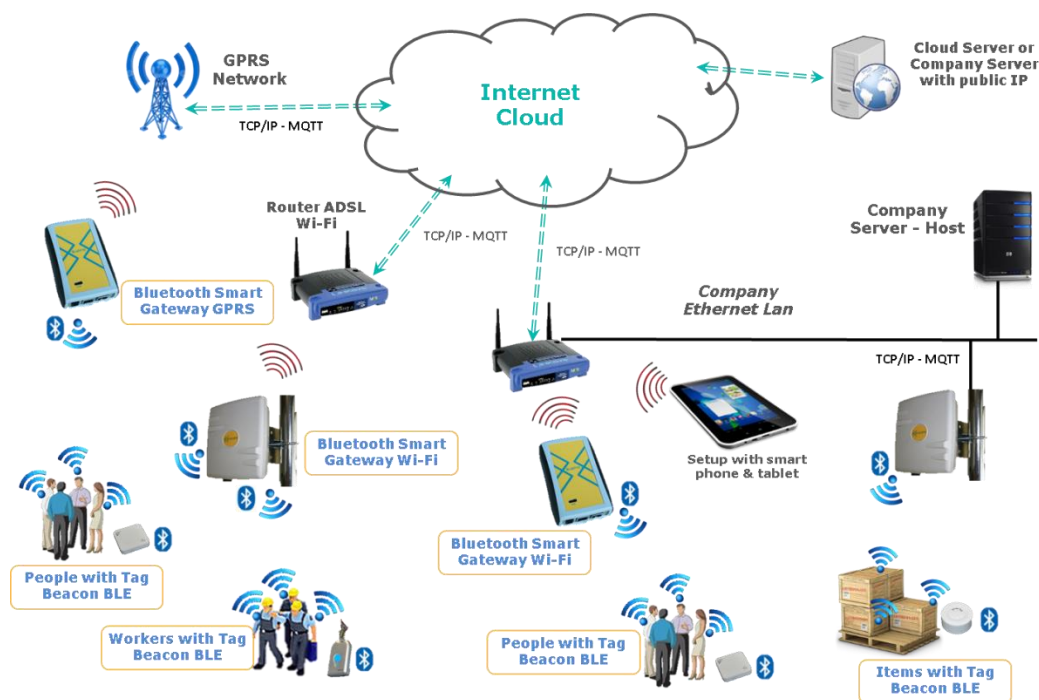
- ❖ Elegant, small size, easy installation, low cost & intelligent Bluetooth Gateway Smart Cloud.
- ❖ Read/Write Beacon & iBeacon Tag. On Board Web Server.
- ❖ Host Interfaces: Ethernet / Wi-Fi / Mobile GPRS quad-band. RTC. CPU & I/O
- ❖ IoT & Active RFID application. Real Time Location System & Indoor Positioning System.
- ❖ Inventory, track & trace for people, animals & goods, etc...
- ❖ 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...)

General Features

BE-BLEG – BlueEpyc BLE Beacon Gateway Family

- ❖ Operation Frequency: 2,4 GHz. IEEE Standard: 802.15.1 (Bluetooth 4.x Low Energy)
- ❖ Bluetooth integrated antenna or SMA connector for external antenna.
- ❖ Reading Range: up to 100 meters (depending on environment, configuration, Bluetooth antenna & tag beacon feature). Anti-collision Beacons reading.
- ❖ Data Rate: 1 Mbit/s. Security 128-bit AES. Transmit power: +3 dBm. RX sensitivity: -85dBm to -91dBm.
- ❖ CPU Feature - Low Power 16 Bit 16Mips microcontroller.
- ❖ Host Interfaces: Lan Ethernet or Wi-Fi or Mobile GPRS quadband.
- ❖ I/O on external plug (8 wire): 3 x digital input, 4 x digital output. Internal interface: 1 x buzzer, 1 x Led bicolor, 1 x I2C Interface.
- ❖ Real Time Clock/Calendar with battery. Slot for Micro SD memory card & SIM Card.
- ❖ Web Cloud Device: Web Server for configuration via Internet browser (Ethernet & Wi-Fi versions).
- ❖ Firmware Feature: on board BLE management protocol, anti-collision, read BLE Advertising & RSSI, Lan/Internet notification mode (TCP), read/write BLE parameter, filtering on RSSI Level, filtering on beacons mask. Dataset: Beacon Advertising, Time, RSSI & I/O status. Trigger wake-up (2 inputs), Tag on presence output.
- ❖ Possibility of custom applications (on request)

Scenario & connectivity IoT/Cloud



Technical Data

BE-BLEG – BluePyc BLE Beacon Gateway Family

Desktop Gateway Version

Desktop Case - ABS-94HB. Protection class IP40.
 Dimensions (HxWxD): 121.9 x 78.7 x 33 mm.
 Weight: About 150 g. Colour: Gray with Dark Gray Rubber Sides.
 I/O on external RJ45 (8 wire): 3 x digital input, 4 x digital output.

- ❖ **BE-BLEG-D-E** BluePyc Bluetooth Low Energy Gateway Desktop Ethernet
- ❖ **BE-BLEG-D-W** BluePyc Bluetooth Low Energy Gateway Desktop Wi-Fi
- ❖ **BE-BLEG-D-M** BluePyc Bluetooth Low Energy Gateway Desktop GPRS



Industrial Wall Mount Gateway Version

Indoor & Outdoor Case - Radome Plastic (UV rating). Protection class IP67. Dimensions (HxWxD): 185 x 185 x 56 mm.
 Weight: About 450 g. Colour: White
 Wall, Ceiling & Pole Mount. Aluminium Mounting kit included.
 I/O on external connector: 2 x digital input, 2 x Output Relè max. 24 V DC / 1 A.

- ❖ **BE-BLEG-WM-E** BluePyc Bluetooth Low Energy Gateway Industrial Wall Mount Ethernet
- ❖ **BE-BLEG-WM-W** BluePyc Bluetooth Low Energy Gateway Industrial Wall Mount Wi-Fi
- ❖ **BE-BLEG-WM-M** BluePyc Bluetooth Low Energy Gateway Industrial Wall Mount GPRS



Models	BE-BLEG-D-E BE-BLEG-WM-E	BE-BLEG-D-W BE-BLEG-WM-W	BE-BLEG-D-M BE-BLEG-WM-M
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Host Communication	Ethernet RJ45 (10/100).	Wireless Ethernet 802.11 b/g/n	Mobile GPRS quadband
Power supply	12 VDC (+/- 5 %) external power supply (not included)		
CPU	Low Power 16 bits, 16 MIPS, PIC 24FJ256GB206 processor Memory: 256K Flash, 96K Ram, 16Mbit Flash (for web server), 64Kbit EEPROM.		
Operating frequency	2,4 GHz. IEEE Standard: 802.15.1		
Bluetooth RF Antenna	Integrated ceramic antenna or SMA connector for external antenna (2 variant).		
Reading Features	Anti-collision Beacons reading. Read Performance: about 80 tags per second Read Range: up to 100 meters (depending on environment, configuration, Bluetooth antenna and beacon feature).		
Data Rate & RF Power	1 Mbit/s. Security 128-bit AES. Transmit power: +3 dBm. RX sensitivity: to -91dBm.		
Other Features	Real Time Clock/Calendar with battery. Slot for Micro SD memory card. Internal interface: 1 x buzzer, 1 x Led bicolor, 1 x I2C Interface		
Power consumption	Typical: 400 mA - Max 2 Amp		
Temperature range	Operation: -20° C up to 65° C - Storage: -20° C up to 85° C		
Standard Firmware & Reader modes	On board BLE management protocol, anti-collision, read BLE Advertising & RSSI, Lan/Internet notification mode (TCP), read/write BLE parameter, filtering on RSSI level, filtering beacons mask. Dataset: Beacon Advertising, Time, RSSI & I/O status. Trigger wake-up (2 inputs), Tag on presence (3 Outputs). Possibility of custom applications (on request)		
Configuration mode	Low-level commands, Client Application or via On Board Web Server (Internet Browser)		Pre-set in lab or Mobile SMS

Scenarios

BE-BLEG – BlueEpic BLE Beacon Gateway Family



- ❖ 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.

