

BluFi™ BLE – WiFi Gateways



TECHNOLOGY HIGHLIGHTS:

- ⌋ Bluetooth Smart 4.1 and WiFi compliant
- ⌋ iBeacon (Apple), Eddystone (Google) and sBeacon (Bluision) supported concurrently
- ⌋ Models for any standard A/C power outlet
- ⌋ Battery backed BluFi DC with up-to 6 months run-time
- ⌋ Outdoor option with solar panel power e.g. for parking lots
- ⌋ Location precision down to 6.6 ft (2m)
- ⌋ Central management possible

BLUETOOTH SMART TO WIFI GATEWAYS FOR BEACON MANGEMENT

- ⌋ **Cloud Enabled** – Bi-directional BLE to WiFi gateway for remote management
- ⌋ **Smart** – Accurately measures distance to BLE Beacons for RTLS
- ⌋ **Rapid Implementation** – Simply install at any conventional power plug

BluFi™ are Bluetooth Low-Energy (BLE) to Wifi gateways that relay signals between BEEKs Beacons and the cloud of HID Global's end-to-end IoT ecosystem. In combination with the corresponding Bluzone™ cloud services, BluFi enable BEEKs™ beacons to be centrally managed through the cloud, to transfer new messages, firmware updates, sensor data and battery status checks remotely. Their unique design allows BluFi devices and BEEKs beacons to broadcast reliably even in densely populated WiFi environments.

BEEKs and BluFi are not limited to standard beacon applications. HID Condition Monitoring Services, enabled by Bluision, include a range of sensor beacons for motion, temperature, light, vibration and even magnetic field. This sensor data is sent via BluFi gateways to the Bluzone Cloud to perform operational analysis for motorized equipment performance, capacity load, door open status etc. Alerts according to policy are received via e-mail or web service.

HID Global Location Services, enabled by Bluision, is an efficient real-time

asset location and item management platform leveraging BEEKs beacons to effectively pin down the locations of assets inside a warehouse, campus or manufacturing hall. The calculation of the BEEKs location is based on received signal strength and other factors measured by BluFi devices installed in standard power plugs at the area that is to be monitored e.g. an office or manufacturing hall.

BluFi AC devices are available in four major international power plug versions and can be installed in any standard power outlet on a wall or ceiling. Battery powered BluFi DC can be installed in any location and have a battery life time of up to 6 months before they need to be recharged. BluFi DC is also available in a weather resistant box with Solar panel power for outdoor applications.

BluFi devices make it easy and cost efficient to cover an area with BLE to internet connectivity to take advantage of centralized management, real-time condition monitoring or location services with a fraction of the effort required by alternative technologies.

APPLICATION AREAS:

Condition Monitoring

- ☞ Wireless status info on motorized equipment (on/off)
- ☞ Fault detection based on vibration or temperature trends
- ☞ Reporting of equipment duty cycles
- ☞ Cold chain applications






Real-time location

- ☞ Indoor position tracking of assets (Tools, portable equipment, vehicles)
- ☞ Position based alerting, heat-maps etc.
- ☞ Workplace optimization
- ☞ Emergency mustering

Retail advertisement

- ☞ BEEKs beacons may be used in iBeacon and/or Eddystone mode for advertising messages or location based services
- ☞ Central provisioning or monitoring via BluFi and Bluzone possible
- ☞ Optional counting phones in vicinity

SPECIFICATIONS

	BluFi™ AC				BluFi™ DC
					
Base Model Number	BVBFUS (US)	BVBFEU (EU)	BVBFAU (UK)	BVBFAU (AU)	BVBFBUS (US), BVBFBEU (EU), BVBFBUK (UK), BVBFBFAU (AU)
ELECTRONIC					
AC Input	100-240 VAC, 50/60 Hz				N/A
AC Plugs / Charge Plug	NEMA 1-15 ungrounded (Type A)	CEE 7/16 "Europlug" (Type C)	BS 1363 (Type G)	AS/NZS 3112 (Type I ungrounded)	Micro USB or PoE with external adapter. USB charger provided according to P/N.
Bluetooth Type	Bluetooth Low Energy 4.1				
Bluetooth Sensitivity	-98dBm				
WiFi Type	802.11 b/g/n				
WiFi Sensitivity	-97.5dBm @ 1DSSS -88.5dBm @ 11 CCK				
WiFi Frequency	2.4 Ghz with coexistence built-in with Bluetooth				
Processor Type	ARM Cortex M4 and ARM Cortex M3				
Memory	256KB Flash (100KB free for custom applications)				
Power Consumption	200mA when TX; 20mA on sleep				
PHYSICAL					
Length × Width	2 × 1.5 x 1.5 in (50 × 38 x 38 mm)				3.4 x 3.2 x 1.2 in (86.1 x 82.2 x 31.8 mm)
Housing Material	Polycarbonate and ABS				
Color	White				Gray
Weight	1.3 oz (37 g)	1.6 oz (46 g)	1.7 oz (48 g)	1.6 oz (46 g)	9.3 oz (264 g)
BATTERY					
Type	N/A				5V / 10.5Ah - Lithium Ion Rechargeable
Life	N/A				15 days without power management - 6 months with power management
CLOUD					
Type	Bluzone Cloud - Cloud realtime managed				
Data Output to Cloud	0.1 to 1Mbit Up data				
CHEMICAL AND MECHANICAL RESISTANCE					
Water					IP67, 68° F (20° C), 3.3 ft (1 m) x 1 h
THERMAL					
Storage	-13° to +149° F (-25° to +65° C)				-4° to +158° F (-20° to +70° C)
Operating Temperature	-13° to +149° F (-25° to +65° C)				-4° to +158° F (-20° to +70° C)
OTHER					
Standards	FCC/CE/UL/FRE; BLE; Wifi 2.4 GHz				FCC/CE; BLE; Wifi 2.4 GHz
Options	Software configurable				Outdoor housing with Solar Panel
Box Size	1 pcs.				
Warranty	1 year				