



SPECIFICATION SHEET

BluFi™ DC 5GHz Ethernet

Base Model Number: BVBFBUS5G, BVBFBEU5G,
BVBFBUK5G, BVBFBAU5G

Version 1.0



HARDWARE SPECIFICATION

LED Indicators	Power on
Charge Plug	Micro-USB or Ethernet (PoE) (Micro-USB charger included based on P/N for US, EU, UK, AU)
Data Link	Wi-Fi (2.4 GHz or 5 GHz); Ethernet
Weight	6.5 oz (186 g)
Size	6.75" x 6.75" x 1.20" (171.5 mm X 171.5 mm X 30 mm)
Temperature Range	-4° to +158° F (-20° to +70° C)
Bluetooth Type	Bluetooth Low Energy 4.1
Bluetooth Sensitivity	-98 dBm
Bluetooth Max Power Output	+5 dBm
Bluetooth Antennas	<ul style="list-style-type: none"> -3 dBm Antenna, Omni Directional +10 dBm Directional Antenna with optional LNA for an additional +5 dBm amplification Optional external antenna via onboard u.fl connector
Frequency Supported	<ul style="list-style-type: none"> 2.4 GHz, 5 GHz ISM bands Bluetooth LE channels: 1- 40 & Adv Ch: 37;38;39 Non-Bluetooth Channels: SDR from 2400 Mhz to 2500 Mhz
Bluetooth Data Rate	1 Mbit/s (2 Mbit/s)
Bluetooth Security	128 bit AES
WiFi Type	802.11 a/b/g/n
WiFi Security	WPA2 Personal and Enterprise Security

WiFi TX Power	20.5dBm @ 1DSSS and 11 CCK 15.0 dBm @ 54 OFDM
WiFi RX Sensitivity	-99 dBm @ 1DSSS -90 dBm @ 11 CCK
WiFi Frequency	2.4 GHz or 5 GHz with built-in coexistence with Bluetooth feature
WiFi Antenna	Omni-directional, 0 dBm
Maximum Power Consumption	380 mA max when TX at 17 dBm 1 Mbs
Power Consumption – Normal TX	9 mA at 0 dBm
CPU	ARM Cortex R4 and ARM Cortex M3
Memory	256 KB Flash (100KB available for custom applications)
Managed services	Cloud real time managed
Data output to cloud	0.1 to 1 Mb up link data
Certifications	FCC/CE/Other (enquire)
Environmental Rating	Sealed: Water Resistant, IP 54

SOFTWARE SPECIFICATION

Embedded RTOS running on both ARM Cortex R4 and M3

WiFi:

- Real-time RAW sockets to Bluzone cloud
- Easy to setup WiFi security key. No need for ad hoc setup; rapid setup and wireless provisioning

Bluetooth:

- Simultaneous support iBeacon + full Eddystone frames
- Bluetooth band support and Out-Of-Band (2.4Ghz ISM) support with auto scan for noise
- Fully compliant with Bluetooth Smart 4.1
- Dual Mode Support: Central and Peripheral
- Supports multiple BLE connections at the same time with peripherals (Supports connecting at the same time to multiple beacons)
- Peripheral supports multiple BLE connections at the same time with Central devices (Supports connecting at the same time to multiple phones)

- Supports Multiple Peripheral Protocols (iBeacon, Eddystone, sBeacon, etc. in same frames)
- Supports Peripheral Reverse RSSI
- Fully Configurable

Security

- Bluzone Cloud – Key-vault managed security
- Unique internal key per individual beacon
- Unique Device ID per individual beacon (sBV2 ID)
- Internal Unix time clock/timer since 'On' (Manufacture)
- RSA Private/Public (With Bluzone Cloud key-vault) - Communication from/to beacon encrypted using RSA

RTLS Mode:

- RTLS Mode with per beacon advertisement millisecond Unix time
- Out-Of-Band adaptive scan advertisement
- 1dB TX Output Accuracy



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