

# BLE: Bluetooth Smart - 2.4 GHz

## Advanced BLE beacons with sensor technology and multi-protocol support

BEEKs™ Bluetooth Low-Energy (BLE) beacons are among the most advanced beacons in the industry. Being fully Apple iBeacon and Google Eddystone compatible, BEEKs beacons may be used for any standard beacon application that provides location based promotional services to smartphone users. When combined with HID Global's end-to-end IoT Services ecosystem, that includes BluFi™ BLE to WiFi gateways and the Bluzone™ cloud services, BEEKs can be centrally managed through the cloud to transfer messages, firmware updates and status information remotely. Their unique design allows BEEKs to broadcast reliably even in densely populated WiFi environments.

|                               | Beacons  |  |  |   |   |   |   |   |   |   | Gateways  |   |   |            |
|-------------------------------|--|--|--|---|---|---|---|---|---|---|---|---|---|------------|
| <b>Product family</b>         | BEEKs™   |  |  |   |   |   |   |   |   |   | BluFi™  |   |   |            |
| <b>Sub-family</b>             | Plus   | Lite                                       | LR   | Mini  | CM v2/Industrial  | LR Industrial                           | Badge   | Duress Badge Holder   | Keyfob  | Wristband   | AC (US/EU/UK/AU)  | DC (Battery)  | DC (Plenum)   |            |
| <b>Description</b>            | BLE beacon without sensors to be used for Proximity Marketing, way-finding and/or real-time location (RTLS). |  | BEEKs LR beacon features a high-gain directional antenna that is especially useful for wayfinding applications | Tiny BLE beacon to support real-time location (RTLS). | Rugged BLE condition monitoring beacon with embedded sensors to measure temperature and vibration of motorized equipment in manufacturing, coolers, escalators etc. |   | Beacon badge that can be optionally combined with passive RFID for access control. Typically used for optimizing office utilization or mustering. | BLE badge holder, into which a horizontally printed (RFID) ISO card can be inserted. Includes call button on the back that can raise an alert in the Bluzone console when in vicinity of a connected BluFi. | BEEKs Keyfob provides an audible alert in addition to the LED and may be used either for duress applications or for physical distancing "aware" applications. | BLE beacon that is worn around the wrist, like a watch to identify patients and supports real-time location applications. | BluFi acts as gateway between BLE beacons and existing WiFi networks to enable cloud based remote management, location and beacon data collection. This model plugs into any standard A/C outlet and features an omnidirectional antenna. | BluFi acts as gateway between BLE beacons and existing WiFi networks to enable cloud based remote management, location and beacon data collection. This model features a rechargeable battery and directional antenna. Optional outdoor housing with solar panel available. | BluFi DC Plenum is a flame resistant, low-voltage DC powered version that is designed to be installed on walls, ceilings or in the plenum, with an optional mounting kit. |            |
| <b>Bluetooth standard</b>     | Bluetooth Low Energy (BLE) 4.2   |  |  | Bluetooth Low Energy 5.0                              | Bluetooth Low Energy (BLE) 4.2  |   |   |   |   | Bluetooth Low Energy (BLE) 5.0  | Bluetooth Low Energy (BLE) 4.2 / WiFi: 802.11 b/g/n   |   |   |            |
| <b>Frequency Band</b>         | 2400-2483.5 MHz  |  |  |   |   |   |   |   |   |   |   |   |   |            |
| <b>Processor Type</b>         | ARM Cortex M3 and ARM Cortex M0  |  | ARM Cortex M3  | ARC® EM4  | ARM Cortex M3 and ARM Cortex M0   |   |   |   |   | ARC® EM4 32 bit 24 MHz  | ARM Cortex M4 and ARM Cortex M3   |   |   |            |
| <b>Memory</b>                 | 55KB Flash   |  |  | 128KB Flash   | 55KB Flash  |   |   |   | 128 KB Flash  | 128KB   | 256KB Flash (100KB free for custom applications)  |   |   |            |
| <b>BLE Application</b>        | Eddystone, iBeacon, sBeacon  |  |  |   |   |   |   |   |   | sBeacon   | Eddystone, iBeacon, sBeacon, WiFi   |   |   |            |
| <b>Battery Life</b>           | Up to 8 year battery life  |  |  |   |   |   |   |   |   | RTLS mode (Asset Tracking), advertisement every 500ms: 30 days  | 100-240V AC, 50/60 Hz   | up to 24h   | N/A   |            |
| <b>Dimensions</b>             | 2.41 x 1.46 in (61.3 x 37.2 mm)  | 2.36 in x 0.83 x 0.98 in (60 x 21 x 25 mm) | 2.48 in x 2.36 x 0.86 in (63 x 60 x 22 mm)   | 1.2 in x 0.4 in (30 x 10 mm)                          | 2.36 in x 0.83 x 0.98 in (60 x 21 x 25 mm)  | 2.48 x 2.36 x 0.86 in (63 x 60 x 22 mm) | 2.14 x 3.39 in (54 x 86 mm)   | 2.5 in x 3.5 in x 0.19 in (64 mm x 89 mm x 5 mm)  | 2.79 in x 1.67 in x 0.57 in (71 mm x 43 mm x 15 mm)   | 1.5 in x 11.8 in x 0.4 in (39 x 300 x 10 mm)  | 2 x 1.5 x 1.5 in (50 x 38 x 38 mm)  | 3.4 X 3.2 X 1.2 in (86.1 X 82.2 X 31.8 mm)  |   |            |
| <b>Affixation</b>             | 3M VHB adhesive sticker or Epoxy glue  |  |  |   |   |   | Clip  |   |   | A/C power plug  |   |   | Micro USB   | USB Type A |
| <b>Weight</b>                 | 2.7 oz (76 g)  | 1 oz (28 g)                                | 3.3 oz (93.5 g)  | 0.24 oz (7 g)   | max. 1.37 oz (39 g)   | 3.3 oz (93.5 g)                         | 0.5 oz (14 g)   | 0.85 oz (24 g)  | 1.3 oz (37 g)   | 0.3 oz (9 g)  | 1.7 oz (48 g)   | 9.3 oz (264 gr)   | 4.13 oz (117 g)   |            |
| <b>Water</b>                  | IP65   |  | IP67   | IP65 and IP67   |   | IP67                                    | IP65  |   |   | IP67  |   |   |   |            |
| <b>Operating temperature</b>  | -13° to +170° F (-25° to +77° C)   |  | -22° to +170° F (-30° to +77° C)   | -4° to +140° F (-20° to +60° C)                       | -13° F to +185° F (-25° C to +85° C)  | -22° to +170° F (-30° to +77° C)        | -4°F to +138°F (-20°C to +59°C)   | -22° to +158° F (-30° to +70° C)  |   | -4° to +140° F (-20° to +60° C)   | -13° to +149° F (-25° to +65° C)  | -4° to +158° F (-20° to +70° C)   |   |            |
| <b>Withstands Exposure To</b> | Water and UV Resistant   |  |  |   |   |   |   |   |   | Water resistant   |   |   | Flame UL-2043   |            |
| <b>Compliant with</b>         | FCC / CE   | FCC / CE / JRF / IC                        | FCC / CE   | FCC   | FCC / CE / JRF / IC   | FCC / CE                                | FCC / CE  |   | FCC / CE / IC / MIC   | FCC   | FCC/CE/UL/FRE; BLE; Wifi 2.4 GHz  | FCC/CE; BLE; Wifi 2.4 GHz   |   |            |

\*Battery life is dependent on device configuration, such as broadcast power and transmission rate. This estimate is based upon typical beacon configuration and use-cases. This estimate is subject to increase or decrease based on specific usage needs.

