

## 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						
Product family	BEEKs™										BluFi™						
Sub-family	Plus	Lite	LR	Mini	CM v2/Industrial	LR Industrial	Badge	Duress Badge Holder	Keyfob	Wristband	AC (US/EU/UK/AU)	DC (Battery)	DC (Plenum)				
Description	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 features a rechargeable battery and directional antenna. Optional outdoor housing with solar panel available.	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.				
Bluetooth standard	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						
Frequency Band	2400-2483.5 MHz										2400-2483.5 MHz (40 channels)						
Processor Type	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						
Memory	55KB Flash			128KB Flash	55KB Flash			128 KB Flash	128KB			256KB Flash (100KB free for custom applications)					
BLE Application	Eddystone, iBeacon, sBeacon										sBeacon	Eddystone, iBeacon, sBeacon, WiFi					
Battery Life	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			
Dimensions	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)					
Affixation	3M VHB adhesive sticker or Epoxy glue										Clip	A/C power plug	Micro USB	USB Type A			
Weight	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)				
Water	IP65		IP67	IP65 and IP67		IP67	IP65		IP67	IP67							
Operating temperature	-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°F to +140°F (-20° to +60°C)	-13° to +149°F (-25° to +65°C)	-4° to +158°F (-20° to +70°C)						
Withstands Exposure To	Water and UV Resistant										Water resistant						
Compliant with	FCC / CE	FCC / CE / JRF / IC	FCC / CE	FCC	FCC / CE / JRF / IC	FCC / CE	FCC / CE	FCC / CE / IC / MIC	FCC	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.

