

EasyReach Mini Beacon Tags

Bluetooth Low Energy Tags - Ultra Small for asset tracking

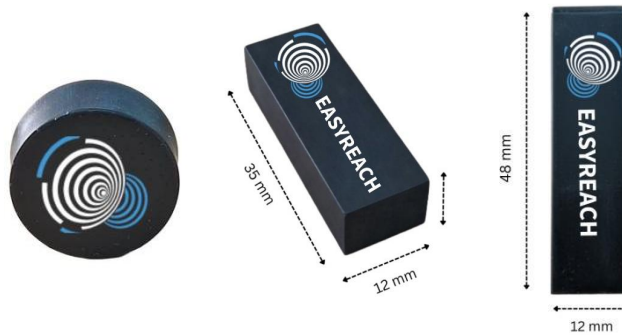


Figure 1 ER-beacon-V1.0

Product Overview

The **ER-beacon-V1.0** is a compact, low-power Bluetooth Low Energy (BLE) 5.3-compliant module, purpose-built for beaconing and asset-tracking applications. Owing to its cost-effective pricing, customers frequently choose this device for initial pilot testing compared to the BLE Tag – Small. The module is widely deployed for tracking moving assets such as forklifts, industrial materials, and equipment. Designed and manufactured in India, **EasyReach Mini Tags** broadcasts beacon signals at **1-second intervals** and supports both **Eddystone** and **iBeacon advertisement formats**. Housed in a robust **ABS plastic enclosure**, the device ensures reliable protection in industrial environments. Its small form factor and low power consumption make it suitable for a broad range of applications across **industrial, retail, and IoT sectors**.

- Tracking forklift, counting round trips
- Monitoring time spent at various locations in factory
- Finding location of the assets in the factory
- Generating alert based on unavailability of the beacon (logic developed on cloud software)

The small form factor, combined with low power consumption, makes it perfect for a wide range of applications such as industrial, retail, and IoT. The device comes with 1 year warranty.

Technical Specifications

Parameter	Value
Bluetooth Version	BLE 5.3
Operating Voltage	1.6V - 3.6V
Sleep Mode Current	< 650nA
Operating Temperature	-40°C to +60°C (industrial)
Package Type	ABS Enclosure

Power Backup	3 month
Communication Range	30-40 meters line of sight
Cell	Coin Cell
Replaceable Cell	Yes
Beaconing interval	1 second with 0 dBm power
Dimensions	55 mm x 25 mm x 10mm
Weight	10 gm
Supports	Eddystone / iBeacon
Acceleration Sensor	No
Temperature Sensor	No
Connectable	No

*Battery life depends upon parameters set such as advertising interval, transmit power, Rx mode time. ,etc.

EddyStone Payload

0x0303AAFE1716AAFE00C5304541354552323630463030313030320000

Bytes	Value	Description
03	Length	3 bytes
03	AD Type	Complete List of 16-bit Service UUIDs
AA FE	UUID	Eddystone Service UUID
17	Length	23 bytes
16	AD Type	Service Data
AA FE	UUID	Eddystone Service UUID
00	Frame Type	UID Frame
C5	TX Power	Calibrated TX Power = -59 dBm
30454135455232363046	Namespace ID	ASCII = 0EA5ER260F
303031303032	Instance ID	ASCII = 001002
0000	RFU	Reserved for Future Use

iBeacon Payload

0x1AFF4C000215E2C56DB5DFFB48D2B060D0F5A71096E000010002C5

Bytes	Value	Description
1A	Length	26 bytes
FF	AD Type	Manufacturer Specific Data
4C00	Company ID	Apple (Little Endian)
02	Beacon Type	iBeacon
15	Remaining Length	21 bytes
E2C56DB5DFFB48D2B060D0F5A71096E0	Proximity UUID	Unique Beacon UUID
0001	Major	1
0002	Minor	2
C5	Measured Power	-59 dBm

For higher quantities, EasyReach is flexible to change configuration based on the hardware feasibility