



# LORA BEACON

## Viaanix VELORABEACON101



The LoRa Beacon is a low energy, low cost, long range asset tracking solution. It can be mounted to small assets and wake upon movement.

When woken, the LoRa module installed on asset communicates to LoRa gateway thus prompting a message to be sent to end user via cellular LTE modem.

### Key Benefits

- Easy Integration for LoRa network systems
- Low power consumption
- 128KB Flash Memory
- Wake on movement
- FCC and CE certified
- LoRaWAN capable
- Can be soldered on motherboard or act independent

### Environmental

- Extended temperature range:  
-40°C to +85°C  
(storage and operating)

### Electrical

- <1uA sleep current
- Supply Voltage:  
Nominal : 3.3 VDC  
Range : 2.4- 3.6V

### Product Features

- LoRa Modem
- 157 dB maximum link budget
- +20 dBm at 100 mW constant RF output vs. V supply
- +14 dBm high efficiency PA
- Programmable bit rate up to 300 kbps
- High sensitivity: down to -137 dBm
- Bullet-Proof front end: IIP3 = -12.5 dBm
- 89 dB blocking immunity
- Low RX current of 10 mA, 100nA register retention
- Fully integrated synthesizer with a resolution of 61HZ
- FSK, GFSK, MSK, GMSK, LoRa and OOK Modulation
- Built-in bit synchronizer for clock recovery
- Preamble detection
- 127 dB Dynamic Range RSSI
- Automatic RF sense and CAD with ultra-fast AFC
- Packet Engine up to 256 bytes with CRC
- Built-in temperature sensor and low battery indicator

### Interfaces

- UART

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