

General Overview

Product name	BeeSense Flex
Model name	BNG500
Dimensions	116 mm × 69 mm × 22 mm
	4.57 in × 2.72 in × 0.87 in
Weight	161 g
	5.7 oz
Housing	ABS plastic enclosure
Available information	Temperature, Humidity, Motion, Light, Shock data and events, LTE-1/GSM, GPS, Wi-Fi location, Battery and system status, BLE Scanning
Ingress protection rating	IP67
Flight detection	Yes
(U)SIM Interface	Nano SIM

Temperature Calibration

Calibration Standard	NIST Certified
Calibration certificate	Available upon request

Technical data

Battery type	3*AA NiMH Rechargeable battery, 2200 mAh
Battery life	Device transmits data for 15 to 40 days on a single charge, depending on cloud reporting interval, as detailed on page 2.
LEDs	2 LED's Power and Status LED
Charging	Via C-Type USB cable
Storage Capacity	Upto 10000 messages
Cellular network type	4G (LTE-1) and GSM
Cellular coverage	Global
Cellular Antenna	Internal
GNSS Antenna	Internal, GPS/ GLONASS/ BDS/ Galileo QZSS

Measurement Data

Measurement Interval Sampling rate	6 minutes (Minimum)
Data Reporting	The device needs to wake up and establish a connection to upload measurement data to the Roambee HC Cloud.
Wake-up schedule	Adjustable from 6min to 24h frequency. The device wakes up when an excursion triggers an alarm, regardless of the schedule.
Gravity Measurement Range	±2g/±4g/±8g/±16g
ODR Bandwidth for Accelerometer	1Hz ~ 400Hz
Temperature range Logs Temperature: Yes Cloud connection: Can be established. Battery life: Normal	-30°C to +70°C
Humidity Range Logs Humidity: Yes Battery Life: Normal	0 to 99% RH
Ambient and Tamper range Illuminance Range: 0 to 100 Lux	0-100 LUX adjustable levels

Certifications

Approvals	CE, FCC, Giteki
Aviation compliance	FAA and EASA

Scanning Feature

WLAN	2.4GHz 802.11b (Rx) (Max 5 Locations)
Bluetooth	Bluetooth 5.0 (can report up to 100 beacons at once via HC Portal)

Battery type

The device is powered by a rechargeable NiMH battery, 2200mAh. NiMH batteries are not considered dangerous goods. The battery lifecycle is at least 500 charge cycles.

Battery life

The reporting interval can be changed remotely through the Roambee cloud using the cellular network

The device enters hibernation mode when the battery level reaches 10% or less, at which stage it stops attempting to connect to the Roambee cloud.

The battery life depends on the set wake-up interval, as shown in the table below.

Wake-up interval	Battery life
15 mins	15 days
30 mins	25 days
1 hours	40 days
6 hours	75 days
12 hours	100 days
24 hours	>100 days

