

Solar Bluetooth Gateway

The Lansitec Solar Bluetooth Gateway (NB-IoT/LTE-M) captures data from nearby BLE beacons and sensors—such as temperature or positioning information—and transmits it to the cloud via NB-IoT or LTE-M. Featuring a 3W solar panel and a 5300mAh rechargeable battery, it runs maintenance-free in harsh environments. Its IP66-rated enclosure, adjustable reporting intervals, and support for iBeacon, Eddystone, and custom Bluetooth protocols make it a flexible solution for long-term asset and inventory tracking across a wide range of industries.



Global NB-IoT/LTE-M Coverage

Operates on multiple bands, ensuring reliable connectivity worldwide.

Solar-Powered & Rechargeable Battery

A 3W solar panel and 5300mAh Li-ion battery offer low-maintenance, sustainable power.

Versatile Bluetooth Integration

Gathers data from iBeacon, Eddystone, or private BLE beacons; adjustable payload filtering optimizes bandwidth.

IP66 Enclosure

Resists dust, water, and extreme temperatures (-40°C to +70°C).

Configurable Report Intervals

Adjust frequency of both Bluetooth scanning and cellular uploads to balance real-time data needs with power efficiency.

FOTA Over Bluetooth

Update firmware without disassembly, reducing downtime and field service costs. ensuring year-round durability.

SCENARIO



HOSPITAL ASSET TRACKING

Continuously monitor high-value medical equipment in real time. The solar-powered design suits semi-outdoor usage, such as ambulance staging areas or portable triage stations, minimizing battery swaps and maintenance visits.



VEHICLE TRACKING

Oversee fleet movement and engine diagnostics by reading BLE sensor data. Forward aggregated telemetry (e.g., speed, location, temperature) to the cloud via NB-IoT or LTE-M for efficient scheduling and route optimization.



FIELD SECURITY SYSTEMS



OUTDOOR RETAIL MANAGEMENT

Deploy for temporary security checkpoints or remote outposts. Solar charging and robust cellular connectivity allow you to track personnel badges and local BLE sensors anywhere, without requiring a dedicated power source.

Position at outdoor markets, festivals, or pop-up shops. Gather customer foot-traffic data via BLE beacons, while NB-IoT/LTE-M backhaul offers reliable connectivity for sales analytics and marketing insights.

SPECIFICATIONS

CONNECTIVITY

Protocol	MQTT, HTTP	
LoRaWAN	Optional	
LTE-FDD	Band	Data Rate (Peak)
LTE-M	B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/ B20/B25/B26/B27/B28/B66/B85	588 (DL) 1119 (UL)
NB-IoT	B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/ B20/B25/B28/B66/B71/B85	Cat NB2: 127 (DL) 158.5 (UL) Cat NB1: Max. 32 (DL) Max. 70 (UL)
Wifi	Optional, 2.4GHz, positioning only	N/A
SIM Card	Nano and eSIM	N/A

BLUETOOTH

Bluetooth Protocol	5.0, iBeacon, Eddystone, private
Bluetooth TX Power	-20 to +4 dBm TX power, configurable in 4 dBm steps
Bluetooth Sensitivity	-96dBm

MECHANICS

Dimension Option 1	160*160*55mm
Ingress Protection	IP66
Housing Materials	Anti-UV PC-ABS
Operating Temperature	-20°C ~ +65°C
Charging Temperature	-20°C ~ +60°C
Storage Temperature	-45°C ~ +85°C
Operating Humidity	0% ~ 95% (non-condensing)
PCB Coating	Water proof coating
Weight	460g
IP Rating	IP66

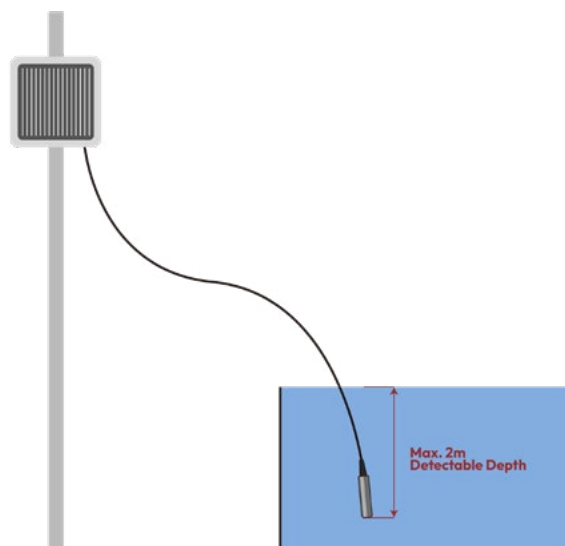
POWER

Battery	Li-ion rechargeable battery, 5300mAh
Battery Life	1 month @ 10s Bluetooth receiving duration and 60 report interval
Bluetooth positioning	Approx. 19,875 times *
GNSS	Approx. 57,000 times
Solar Panel	3W
Standby current	25µA
Max. Current	350mA
Max. Charging Current	500mA
Charging Rate	Max. 1500mAh each day

*Please refer to the battery life calculator for detailed battery life information.

FUNCTIONS

Configurable Bluetooth data filter and payload report	Filter any data bytes in a Bluetooth payload and report any via NB-IoT and LTE-M
Adjustable Position Report Interval	5s x n (1 to 65536)
Heartbeat Report Interval	30s x n (1 to 65536)
Switch	Mechanical
FOTA over Bluetooth	Support
Encryption	TLS1.2
Max. Uplink Report Bytes	1400
Max. Beacons Supported	105, *Please reach out to us if more are needed.
Bluetooth data compression	Support
Water Level Detection	Optional



ORDERING INFORMATION

Product Description	Part Number
Bluetooth Gateway, built-in antenna, solar, NB-IoT, LTE-M, Bluetooth 5.0, 160x160x55mm, IP66, 5300mAh	100-NBBG1
Certification	CE, FCC, RCM