

## Macro Bluetooth Gateway

The Lansitec Macro Bluetooth Gateway (NB-IoT/LTE-M) gathers data from nearby BLE beacons, sensors, or controllers, then forwards it to a remote server via cellular networks. Equipped with a 38,000mAh (low-discharge) battery, it can operate for five years or more, even in challenging environments. With IP66 protection, an adjustable reporting interval, and broad BLE protocol support (iBeacon, Eddystone, private), this gateway delivers a versatile, long-term solution for various asset tracking and monitoring applications.



### Long-Life Battery

A 38,000mAh Li-SoCl<sub>2</sub> power source can deliver 5+ years of operation at default settings (5s BLE scanning, 240s cellular reporting).

### Wide Cellular Coverage

NB-IoT/LTE-M worldwide bands ensure data transmission even in remote or low-signal areas.

### Multiple BLE Protocols

Works with iBeacon, Eddystone, and proprietary formats for broad sensor compatibility.

### Rugged IP66 Enclosure

Suitable for outdoor or industrial environments (-45°C to +85°C).

### Configurable Data & Interval

Users can adjust Bluetooth payload filters and upload frequency to balance power usage and data needs.

### FOTA Over Bluetooth

Supports firmware upgrades without physical servicing, reducing maintenance overhead.

## SCENARIO



HOSPITAL ASSET TRACKING

Monitor critical medical devices (e.g., infusion pumps, portable X-ray units) and forward real-time usage and location to hospital IT systems. Ultra-long battery life reduces manual checks and maintenance.



VEHICLE TRACKING

Gather BLE sensor info (fuel, tire pressure, diagnostics) from fleet vehicles. Relay aggregated data to the cloud for route optimization, safety checks, and real-time alerts.



**INDUSTRIAL INVENTORY**



**OFF-GRID INFRASTRUCTURE**

Track and manage large machinery or warehouse pallets over extended periods without frequent battery replacements. Alerts and data trends help minimize downtime and streamline logistics.

Ideal for remote facilities (e.g., telecom towers, solar farms) lacking consistent power supply. The durable design and low discharge battery enable automatic sensor readings and status reports even under harsh conditions.

## SPECIFICATIONS

### CONNECTIVITY

<b>Protocol</b>	MQTT, HTTP	
<b>LoRaWAN</b>	Optional	
<b>LTE-FDD</b>	<b>Band</b>	<b>Data Rate (Peak)</b>
<b>LTE-M</b>	B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/ B20/B25/B26/B27/B28/B66/B85	588 (DL) 1119 (UL)
<b>NB-IoT</b>	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)
<b>Wifi</b>	Optional, 2.4GHz, positioning only	N/A
<b>SIM Card</b>	Nano and eSIM	N/A

### BLUETOOTH

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

### MECHANICS

<b>Dimension Option 1</b>	160*160*55mm
<b>Ingress Protection</b>	IP66
<b>Housing Materials</b>	Anti-UV PC-ABS
<b>Operating Temperature</b>	-20°C ~ +65°C
<b>Storage Temperature</b>	-60°C ~ +90°C
<b>Operating Humidity</b>	0% ~ 95% (non-condensing)
<b>PCB Coating</b>	Water proof coating
<b>Weight</b>	530g
<b>IP Rating</b>	IP66

## POWER

<b>Battery</b>	Li-SoCl <sub>2</sub> 19000mAhx2, optional: 19000mAhx4/19000mAhx6
<b>Battery Life</b>	5 years @ 5s Bluetooth receiving duration and 240s report interval
<b>Standby Current</b>	25µA
<b>Max. Current</b>	350mA
<b>Bluetooth Positioning</b>	Approx. 142,500 times
<b>GNSS</b>	Approx. 57,000 times

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

## FUNCTIONS

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

## ORDERING INFORMATION

Product Description	Part Number
Bluetooth Gateway, built-in antenna, NB-IoT, LTE-M, Bluetooth 5.0, 160x160x55mm, IP66, 38000mAh	100-NBBG2
<b>Certification</b>	CE, FCC, RCM, BQB