

## Solar Bluetooth Gateway

The Lansitec Solar Bluetooth Gateway (Cat-1) scans and restructures data from nearby BLE sensors, beacons, and controllers, transmitting it to the cloud through a global LTE Cat-1 network. Equipped with a 3W solar panel and a 5300 mAh rechargeable battery, it operates maintenance-free in extreme environments. The device's IP66-rated enclosure, adjustable reporting intervals, and support for multiple Bluetooth protocols (iBeacon, Eddystone, private) make it ideal for monitoring assets, vehicles, or personnel over wide areas.



### Cat-1 Global Coverage

Works across multiple frequency bands for seamless connectivity worldwide.

### Solar-Powered & Long Battery Life

A 3 W solar panel and 5300 mAh battery ensure reliability, even under harsh conditions or low sunlight.

### iBeacon & Eddystone Compatibility

Scan and forward BLE payloads, with customizable filtering to optimize data usage.

### IP66 Enclosure

Rugged, dustproof, and water-resistant design.

### Adjustable Report Intervals

Configure Bluetooth scanning rates and data uplinks to balance power efficiency and real-time updates.

### FOTA Over Bluetooth

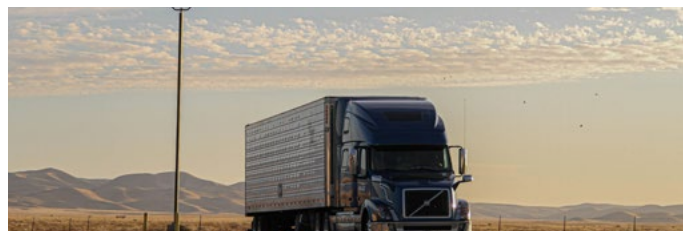
Simplify firmware updates without removing or disassembling the gateway.

## SCENARIO



### HOSPITAL ASSET TRACKING

Collect and transmit location or status updates from BLE-enabled medical devices. Instantly verify the availability of critical equipment like CT machines or monitor drug inventory in real time.



### VEHICLE TRACKING

Deploy on vehicles to gather engine diagnostics, mileage, and usage data from BLE sensors. Leverage Cat-1 connectivity for wide coverage, reducing fleet operating costs.



**FACTORY PERSONNEL TRACKING**



**CONSTRUCTION SITE INVENTORY**

Assign BLE badges to workers in large factories or distribution centers. The gateway's real-time scanning and data forwarding improve safety, resource allocation, and productivity.

Place gateways at construction sites to track material deliveries and equipment usage through BLE tags. Prevent losses, manage tools efficiently, and streamline project timelines by receiving immediate alerts for unauthorized relocations.

## SPECIFICATIONS

### 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
<b>Bluetooth Distance</b>	150m sight distance

### CAT-1

Regions	North America	Europe / Africa	China / India	Latin America
<b>FFD</b>	B2/B4/B5/B12/B13/B66	B1/B3/B5/B7/B8/B20	B1/B3/B5/B8	B2/B3/B4/B5/B7/B8/B28/B66
<b>TTD</b>	N/A	N/A	B34/B38/B39/B40/B41	N/A
<b>SIM Card</b>	Nano or eSIM			
<b>Protocol</b>	MQTT, HTTP(S), TCP, UDP			

### MECHANICS

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

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

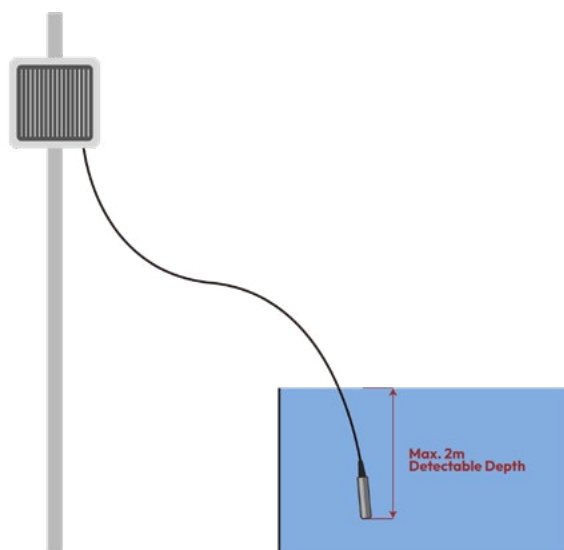
<b>Battery</b>	Li-ion rechargeable battery 5300mAh
<b>Battery Life</b>	1 month @ 10s Bluetooth receiving duration and 60 report interval
<b>Bluetooth positioning</b>	Approx. 23,850 times *
<b>GNSS</b>	Approx. 10,600 times

<b>Solar Panel</b>	3W
<b>Standby Current</b>	25 $\mu$ A
<b>Max. Current</b>	450mA
<b>Max. Charging Current</b>	500mA
<b>Charging Rate</b>	Max. 1500mAh each day

## FUNCTIONS

<b>Adjustable Data Report Interval</b>	5s x n (1 to 65536)
<b>Heartbeat Report Interval</b>	30s x n (1 to 65536)
<b>Configurable Bluetooth data filter and payload report</b>	Filter any data bytes in a Bluetooth payload and report any via Cat-1
<b>FOTA over Bluetooth</b>	Support
<b>Battery Level Report</b>	Support
<b>Switch</b>	Mechanical
<b>Positioning Precision</b>	3m
<b>Cellular-based Positioning</b>	Support
<b>Bluetooth data compression</b>	Support

<b>Water Level Detection</b>	Optional
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## ORDERING INFORMATION

Product Description	Part Number
Bluetooth Gateway, built-in antenna, solar, Bluetooth 5.0, Cat-1, 160x160x55mm, IP66, 5300mAh	100-000C1

<b>Certification</b>	CE, FCC
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