

Macro Bluetooth Gateway

The Lansitec Macro Bluetooth Gateway (Cat-1) offers a uniquely robust power solution with a 38,000 mAh low-discharge battery, enabling continuous operation for 5+ years. It processes and relays Bluetooth (BLE) data — supporting iBeacon, Eddystone, and private protocols — to a server via Cat-1 networks worldwide. Encased in an IP66-rated enclosure, this gateway thrives in extreme temperatures (-40 °C to +70 °C) and demanding outdoor or industrial settings, delivering a reliable, zero-maintenance approach to long-term asset and environmental monitoring.



38,000 mAh Battery

Provides over five years of operation, drastically reducing maintenance visits for remote or hard-to-access installations.

Global Cat-1 Coverage

Supports various regions (North America, Europe/Africa, China/India, Latin America) for seamless data transfer.

Adjustable BLE Payload

Configure packet filtering and scanning intervals to optimize bandwidth and power usage.

IP66 Durability

Resistant to water, dust, and extreme temperatures, ensuring reliable performance in harsh environments.

Wide Protocol Compatibility

Works with iBeacon, Eddystone, private BLE formats, plus advanced encryption (AES128) for secure data handling.

FOTA Over Bluetooth

Quickly update firmware without opening the device or disconnecting power, saving time and labor costs.

SCENARIO



HOSPITAL ASSET TRACKING

Leverage the macro battery capacity to track medical equipment and monitor drug inventories for years without manual recharging. Real-time data minimizes losses and ensures timely patient care.



VEHICLE TRACKING

Deploy on transport fleets operating in remote or international routes. BLE sensors measure key parameters (fuel levels, tire pressure), while Cat-1 connectivity enables broad coverage for location and status updates.



FACTORY OR WAREHOUSE



MINING OPERATIONS

Monitor forklifts, pallets, or sensitive machinery in large facilities. The gateway's extended battery life and IP66 rating eliminate the need for external power or frequent checks, lowering overhead.

Place the gateway on mining equipment to track usage hours, vibration metrics, and location. The robust enclosure and long-lasting battery reduce downtime in rugged, power-scarce environments.

SPECIFICATIONS

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
Bluetooth Distance	150m sight distance

CAT-1

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

FUNCTIONS

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

MECHANICS

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

POWER

Battery	Li-SoCl ₂ 19000mAhx2, optional: 19000mAhx4/19000mAhx6
Battery Life	5 years @ 5s Bluetooth receiving duration and 240 report interval
Standby Current	25μA
Max. Current	450mA
Bluetooth positioning	Approx. 171,000 times
GNSS	Approx. 76,000 times

Certification	CE, FCC
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ORDERING INFORMATION

Product Description	Part Number
Bluetooth Gateway, built-in antenna, Bluetooth 5.0, Cat-1, 160x160x55mm, IP66, 38000mAh	100-000C2