



Multifunctional BLE Sensor

# COMPACT BLUE-TOOTH GATEWAY



## PRODUCT DESCRIPTION

The LoRaWAN Bluetooth Gateway is a compact and high-performance IoT gateway designed for seamless integration of Bluetooth Low Energy (BLE) devices into LoRaWAN networks.

The device captures and processes BLE advertising data from nearby sensors and beacons, applies intelligent filtering rules, and transmits relevant information over long distances via LoRaWAN. Configurable reporting intervals, flexible device filtering, and multiple hardware variants ensure optimal adaptability for industrial and commercial IoT deployments.

## APPLICATIONS

- Asset Tracking & Monitoring
- Industrial IoT Data Collection
- Environmental & Tank Monitoring

## FEATURES

- BLE 5.0 and LoRaWAN dual connectivity
- Configurable via LoRaWAN downlink
- Long-range communication (>1.5 km urban)
- OTAA and ABP activation support
- iBeacon broadcasting capability
- Configurable heartbeat and reporting intervals
- Optional GNSS positioning (<2.5 m accuracy)
- Optional water level monitoring (1 mm resolution)



## TECHNICAL DATA

### LORAWAN

Protocol	LoRaWAN 1.0.2B
Activation	OTAA / ABP
Frequency Bands	EU868, US915, AS923, AU915, CN470, KR920, IN865, EU433
TX Power	0 ~ 20 dBm
Sensitivity	-139 dBm @ SF12 (sub-GHz)
Communication Range	>1.5 km (urban)
Encryption	AES128

### BLUETOOTH

Standard	Bluetooth 5.0
TX Power	+4 to -20 dBm
Sensitivity	-96 dBm
Range	up to 100 m

### POSITIONING (OPTIONAL)

GNSS Systems	GPS, BDS, Galileo, GLONASS, QZSS
Accuracy	<2.5 m (CEP50)
Cold Start	30 – 120s

### OPERATING ENVIRONMENT

Operating Temperature	-20°C to +65°C
Charging Temperature	0°C to +40°C
Storage Temperature	-20°C to +85°C
Operating Humidity	5% up to 95%, non-condensing

### POWER

Power Supply	DC 5V
Battery	600 mAh Li-ion

### INTERFACE & FUNCTIONALITY

BLE Data Processing	Filter blocks & data extraction
Device Capacity	Up to 200 BLE devices
Reporting	Configurable intervals
Connectivity Monitoring	Heartbeat & reconnection logic
iBeacon	Configurable UUID, Major/Minor
Configuration	LoRaWAN downlink commands

### PHYSICAL SPECIFICATIONS

Dimension	95.4 × 61.4 × 7.3 mm
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## ORDER CODES

### VERSIONEN

Compact Bluetooth Gateway

### ORDER CODES

IOT-GA-BL-AT-7201