

BLE Gateway

Unlock the full potential of IoT connectivity with our advanced **BLE Gateway**. This sophisticated bridging device creates a seamless communication link between Bluetooth Low Energy sensors and cloud-based analytics platforms, enabling comprehensive real-time monitoring and intelligent data processing. Engineered around the powerful nRF5340DK system-on-chip, our gateway efficiently aggregates critical environmental parameters—including temperature, humidity, pressure, and more—and transmits this information securely to your management systems. The compact, rugged design ensures reliable operation while empowering organizations with actionable insights for data-driven decision making.

Key Features

- **Ultra-Low Power Operation:** Optimized for continuous operation in energy-sensitive deployments
- **Wireless Connectivity:** Dual-mode communication capabilities
- **Advanced Data Aggregation:** Intelligent sensor data collection and processing
- **Real-Time Monitoring:** Instant data transmission and cloud synchronization
- **FOTA Support:** Firmware Over-The-Air updates for remote maintenance
- **Rugged Construction:** IP66-rated compact design for harsh environments
- **Scalable Connectivity:** Supports 100+ simultaneous node connections
- **Extended Range:** Up to 1km line-of-sight communication capability



Technical Specifications

Parameter	Specification
Input Voltage Range	5V-30V DC (wide range compatibility)
Audio Interface	Integrated microphone and audio connector
Memory Configuration	On-board flash memory
Expansion Options	Integrated SIM card and SD card slots
Cellular Connectivity	Embedded GSM module

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Parameter	Specification
Antenna System	Integrated Bluetooth antenna
Interface Connectors	SPI (x1), I2C (x1), UART (x1)
Bluetooth Protocol	Bluetooth 5.4 Low Energy
Processing Architecture	Dual-Core ARM Cortex-M33
Storage Capacity	512KB RAM + 1MB Flash

Enclosure Specifications

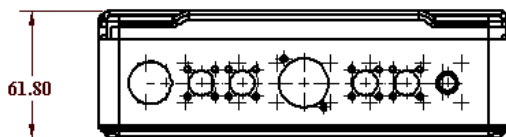
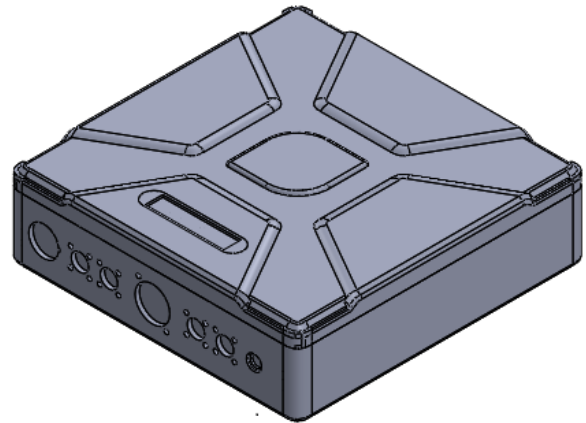
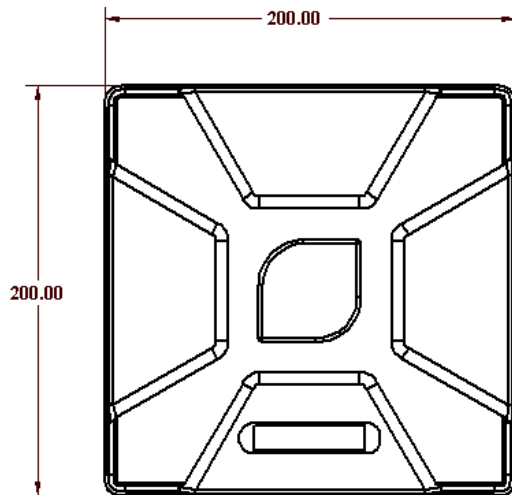
Characteristic	Specification
Material	Industrial-grade Acrylonitrile Butadiene Styrene
Ingress Protection	IP65 (Dust-tight, protected against water jets)
Dimensions	200 × 200 × 63.5 mm
Weight	1.45 kg
Finish	Thermal-reflective glossy white coating
Mounting System	Corrosion-resistant stainless steel brackets
Cable Management	Weather-sealed PG7/PG9 cable glands
UV Resistance	>5 years outdoor exposure rating
Antenna Support	External SMA connectors for enhanced connectivity

Target Applications

- Agricultural Technology:** Precision farming and environmental monitoring
- Supply Chain Management:** Logistics and asset tracking solutions
- Industrial IoT:** Equipment monitoring and predictive maintenance
- Healthcare Systems:** Wearable medical device data aggregation

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- **Smart Infrastructure:** Home automation and energy management systems
- **Commercial Applications:** Retail analytics and customer behavior monitoring



Data Logger

(All the dimensions are in mm)