

Your Gateway to Seamless Tracking

Outdoor Cellular Gateway







Various BLE scanning modes



Various GPS fix modes



Offline data buffering



IP67 waterproof

Global network connectivity

MKGW4

Outdoor Cellular Gateway

MKGW4 is an advanced BLE (Bluetooth Low Energy) to Cellular Gateway, equipped with outdoor GPS positioning. It offers global connectivity through CAT.1/NB-IOT/CAT.M/GSM, along with integrated GPS and LBS fusion positioning technology. Complemented by a motion sensor, MKGW4 provides an efficient solution for cold chain monitoring, logistics transportation management, school bus locating, and safety.



Application Scenarios



Logistics Management



Cold Chain Monitoring



School Bus Safety

General Specs

Mechanics

Material	ABS+PC
Color	Grey
Dimension (L*W*H)	122.4*72.9*33.8 (external wires not included)
IP rating	IP67
IK rating	IK09 (shake proof)

Environment

Operating temperature	-30 °C~ 70 °C
Storage temperature	-40 °C~ 80 °C
Humidity	Maximum 95% non-condensing RH

Hardware

Power supply	Main: 8-52V DC power supply; Backup: 3000mAH Li-on rechargeable battery
LED	4* intelligent RGB LED (to indicate Power, Switch, Cellular and GPS status)
Switch	1* hall sensor, use Magnetic to turn on/off device
Button	1* Reset button inside the device
External Memory	32MB (256Mb), to save offline data
Sensor	3-Axis Accelerometer
SIM card	Nano SIM/ E-SIM
External wires	1* positive power wire; 1* negative power wire; 1* digital input wire

Bluetooth

Chip	nRF52840
Bluetooth Protocol	BLE 5.0 (support 1M/2M/Coded LE PHY)
Bluetooth Mode	Scanning and advertising
Antenna	External/internal antenna is optional

Cellular

Туре	Optional Connectivity Versions:	CAT.1/NB-IOT/CAT.M/GSM
Band	Global bands	

GNSS

Galaxy	GPS, Beidou
Accuracy	2.5M-10M (GPS fixed)
TTFF	Clod start: <=32 s; Warm start: <= 10 s; Hot start:<= 1s
Antenna	Internal
Backup	Cell tower location (LBS) fallback for positioning when GNSS can't get a fix

Communication

Protocol	MQTT V3.1.1
Data security	SSL/TLS
Data Format	Hex
Configuration	APP Bluetooth configuration
FOTA	Bluetooth DFU and MQTT remote OTA