MOKO SMART

Your Gateway to Seamless Tracking

Outdoor Cellular Gateway

GPS · Bluetooth

BLE5.0 · CAT.1 · GSM

Various BLE scanning modes

Various GPS fix modes

Offline data buffering

IP67 waterproof

Global network connectivity

MKGW4
Outdoor Cellular Gateway

The MKGW4 is a highly advanced BLE (Bluetooth Low Energy) to Cellular Gateway, exceptionally equipped with precise outdoor GPS positioning. Powered by the cutting-edge Nordic nRF52840 chip, it offers seamless BLE 5.0 and global connectivity through CAT.1 and GSM, along with integrated GPS and LBS fusion positioning technology. Complemented by a sensitive motion sensor, the MKGW4 provides an efficient and reliable solution for critical cold chain monitoring, dynamic logistics transportation management, accurate school bus locating, and enhanced 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

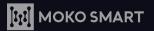|	
Operating temperature	-20 ℃~ 60 ℃
Storage temperature	-30 ℃~ 70 ℃
Humidity	Maximum 95% non-condensing RH

Hardware

Power supply	Main: 4.8-60V DC power supply; Backup: 3200mAH 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

Type	Optional Connectivity Versions: CAT.1/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