



MOKO SMART

Your Gateway to Seamless Tracking

Outdoor Cellular Gateway



IP67 waterproof



Global network connectivity



Various BLE scanning modes



Various GPS fix modes



Offline data buffering



MKGW4

Outdoor Cellular Gateway

The MKGW4 is an advanced Bluetooth Outdoor Cellular Gateway with GNSS and LBS fusion positioning. The gateway is available in USB-powered and vehicle DC-powered versions. It offers global connectivity through CAT.1/NB-IOT/CAT.M/GSM network. Acting as a data bridge between BLE beacons and the cloud, it collects broadcast data from nearby beacons and uploads it via the Cellular network. Meanwhile, the integrated GNSS technology locates MKGW4 and reports its location to the cloud, making transportation routes visible and controllable.

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	IK08 (shake proof)

Environment

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

Hardware

Power supply	Main:8-50 V DC power supply for vehicle/DC power version; 5V/2A USB-C for USB power version 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	DC version: 1*positive power wire, 1*negative power wire, 1*digital input wire Typc-C version: 1*USB cable

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: NB-IOT/CAT.M/CAT.1/GSM
Band	NB-IOT/CAT.M/GSM: global bands CAT.1: Europe/North American/Latin American bands

GNSS

Galaxy	GPS, Beidou, GLONASS
Accuracy	<20M (GNSS fixed)
TTF	Clod start: <=30 s; Warm start: <= 10 s; Hot start:<= 2s
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/MQTT remote configuration
FOTA	Bluetooth DFU and MQTT remote OTA