



# MOKO BLE to WIFI Gateway

## MKGW-mini Series



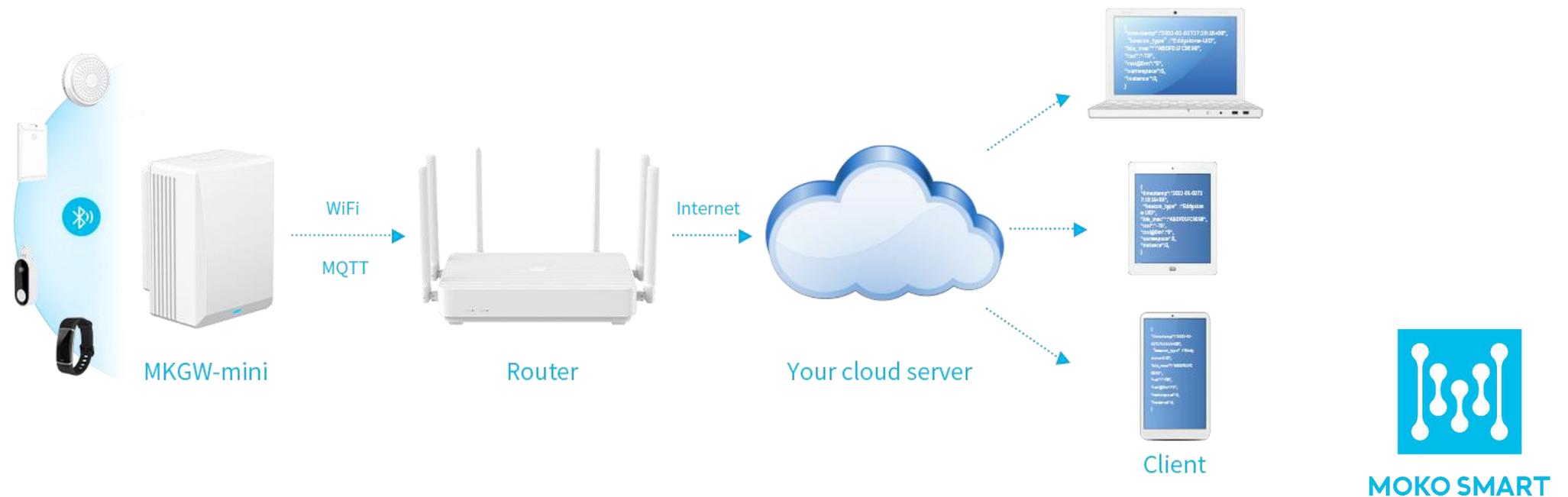
MOKO SMART

# Product Introduction

MKGW-mini series product is a Bluetooth Low Energy (BLE) to WIFI gateway, which works as a data bridge between your beacon and cloud server. It scans and collects the advertising data of the surrounding beacon through Bluetooth, and uploads the Bluetooth data packet to your server through the WIFI network, effectively realize indoor positioning service, centralized asset tracking and real-time status monitoring in a low-cost way.

MKGW-mini is equipped with interchangeable AC plugs and a Micro USB interface, has a flexible power supply method. And it is simple to install, can be used in many countries.

MKGW-mini gateway supports the connection of standard MQTT broker (such as EMQTT, Mosquito) and other servers that support the MQTT protocol, also can work with AWS iot and Alibaba Cloud iot. All data of the gateway will be directly uploaded to your own server, convenience for your further application development.



# Product Model



MKGW-mini 0X - X

Product name: MOKO Gateway

Product model: mini

Plug type: F- Europe  
B- USA  
G- UK

Chipset type: 01- ESP32  
02- ESP32 + nRF52833  
03- RTL8720 + nRF52833

Model	Master module	Slave module	Description
MKGW-mini 01	ESP32	/	Contains three plug types, supports 2.4GHz WIFI and BLE 4.2
MKGW-mini 02	ESP32	nRF52833	Contains three plug types, supports 2.4GHz WIFI and BLE 5.0
MKGW-mini 03	RTL8720	nRF52833	Contains three plug types, supports 2.4GHz & 5GHz WIFI and BLE 5.0



MOKO SMART

# Features

## 1. Mini size and compact design

The gateway has a mini body, will not block the second socket when deployed.

## 2. Interchangeable AC plugs

The AC plug can be interchanged flexibly so that it can be used in many countries.

## 3. Anti-collision falling off design

A locating hole is equipped on the US plug to fix the gateway on the socket to prevent from accident falling off.

## 4. Flexible power supply method

Supports AC 100-240V and DC micro USB power supply.



# Features

## 5. Connection to customer server

- All data is directly uploaded to your server, convenient for your further application development.
- Also ensures the data security and privacy.

## 6. Built-in MOKO standard firmware

- Filter by RSSI, MAC, ADV name and raw data to effectively obtain the target data.
- Upload only unduplicated data to your server in a filter period, effectively saving server resources.
- Locally decode iBeacon, Eddystone(UID/URL/ TLM) and all MOKO beacon raw data.

## 7. Flexible hardware solution

The control board can be quickly replaced to realize different hardware versions. Customers have more choices according to the performance and cost.

## 8. FCC&CE certified (pending)

Product quality and safety are guaranteed.



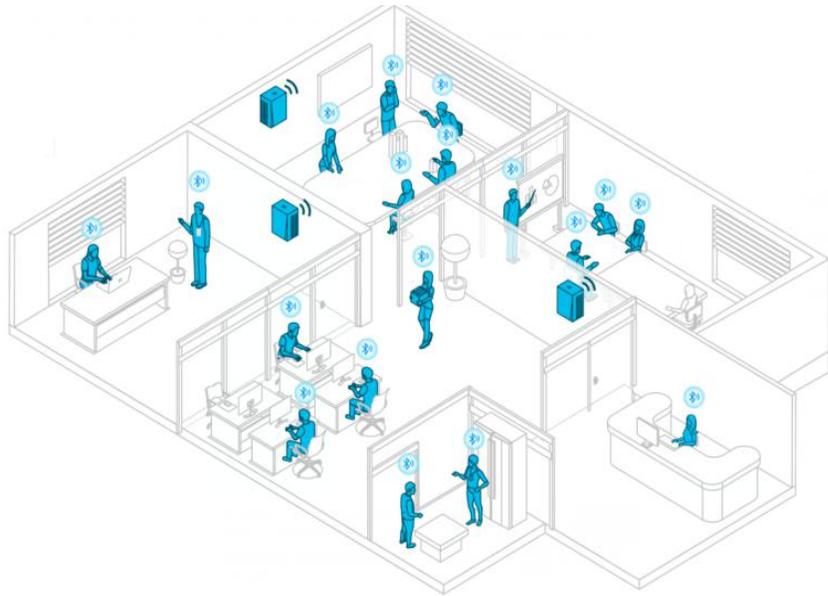
# Applications

Based on its low cost, simple deployment and real-time scanning features, MKGW-mini gateway can be widely used in indoor positioning services, real-time condition monitoring and asset tracking, and is mainly used in smart factory, smart healthcare, smart farms and smart workplace.



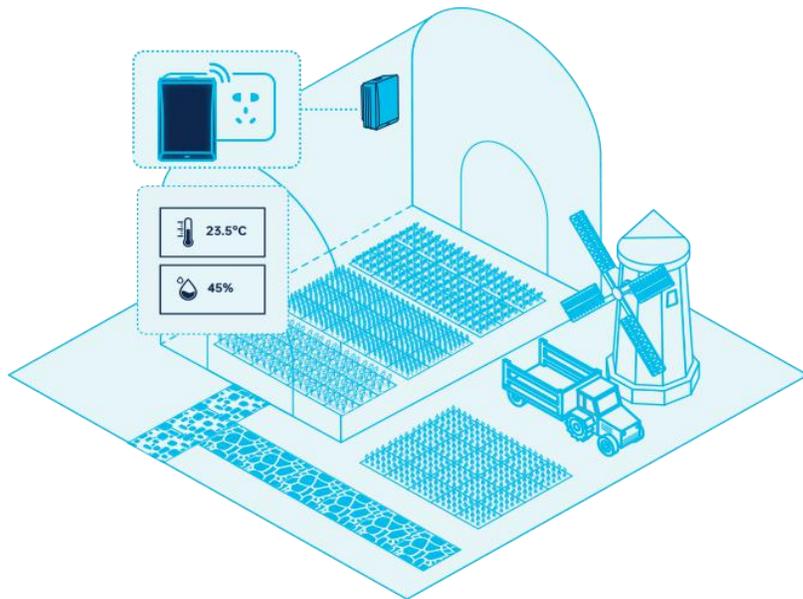
## 1. Indoor positioning service

Deploy the gateway in the museum/exhibition, visitors who enter wear a beacon. The gateway scans the advertising data of the beacon and uploads the data to the server. According to RSSI, MAC address and other information, the real-time location of the visitor can be calculated and located on the server.



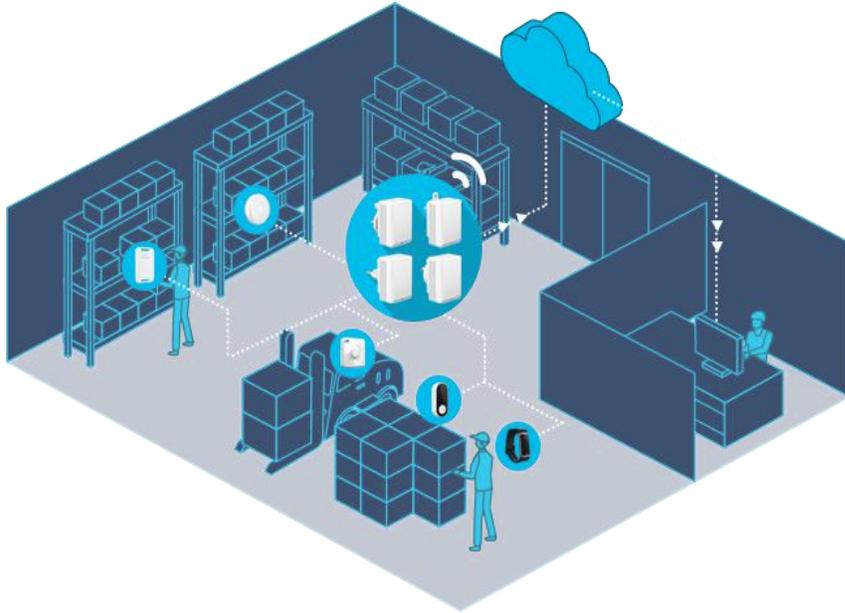
### Scenario 2: Smart Workplace

Deploy the gateway in the workplace, the personnel need to wear an ID card (Beacon), the gateway scans the advertising data of the card and uploads it to the server. You can know the employee's attendance status, working hours and interaction at any time on the server.



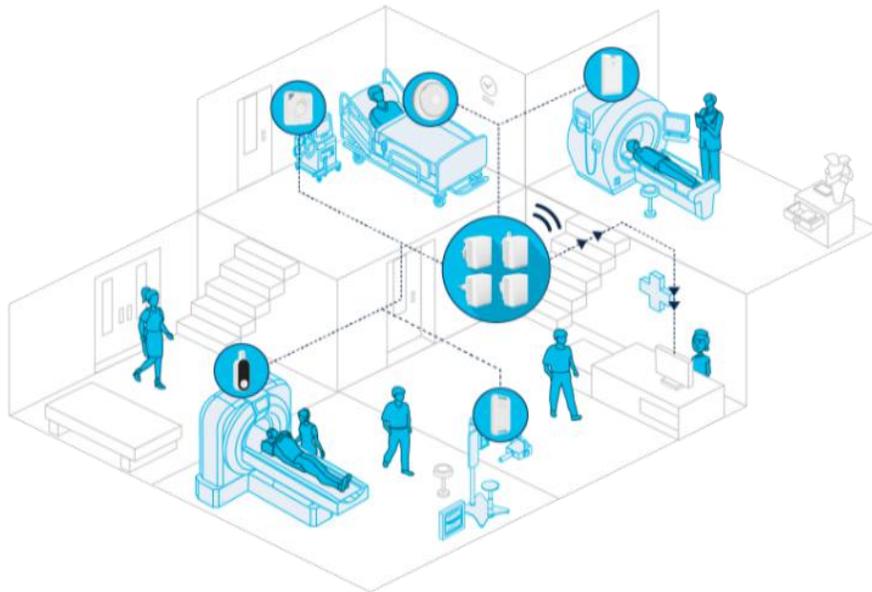
### Scenario 3: Smart Farm

Deploy the gateway in the greenhouse, it can work with the temperature and humidity sensors. The gateway scans the advertising data of the sensor and uploads the data to your server. Generate the T&H change trend report on the server and send a notification when the temperature or humidity exceeds the appropriate range, so that the farmer can make timely adjustments.



#### Scenario 4: Smart Factory

Deploy the gateway in the factory, and deploy beacons on some important equipment, goods and forklifts. The gateway will scan the advertising data of the beacon and upload it to your server. The server can compute and locate the real-time position of the goods, generate motion trajectory reports, so as to understand the utilization rate of the goods. It also can send a notification when the goods are not scanned for a period of time.



#### Scenario 5: Smart Healthcare

Deploy the gateway in the hospital and deploy the beacon on some important and often used medical equipment. The gateway will scan the advertising data of the beacon and upload the data to the server. The server can compute and locate the real-time position based on the timestamp, RSSI, mac address and other messages, so as to realize asset tracking and management.

# Main Specification

## Wireless

WIFI & BLE

## Power Supply

100V-240V AC, 50/60Hz;  
DC 5V Micro USB

## Color

White

## Certification (pending)

USA: FCC

Europe: CE

(The certifications are on the process,  
other certifications can be customized)

## Plug Type

US/UK/EU

## Material

ABS + PC

## Dimensions

61.8mm\*43.4mm\*35mm



# Customized Service

## Based on MOKO standard product

- You can develop your own mobile APP, MOKO provides Android and iOS APP SDK for you to reduce your development time
  - Provides white label service, support customized label and package, also can print your company logo on the products
- 

## Based on MOKO standard hardware

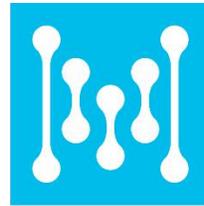
- Flash custom firmware, MOKO provides schematic for your firmware development
  - Support firmware and APP modification according to customer's requirements
  - Support light customization on MOKO standard hardware
- 

## New product design

If MOKO standard products don't meet your requirements, MOKO supports the design of new products for you, including:

- Hardware design
  - Software development
  - Mechanical design
- 

More details about the customized services, please contact our sales team: [Sales@mokosmart.com](mailto:Sales@mokosmart.com)



**MOKO SMART**

## **MOKO TECHNOLOGY LTD.**

**Address:** 4F, Building 2, Guanghui Technology Park, MinQing Rd, Longhua,  
Shenzhen, Guangdong, China

**E-mail:** [Sales@mokosmart.com](mailto:Sales@mokosmart.com)

**Website:** [www.mokosmart.com](http://www.mokosmart.com)

[www.mokoblue.com](http://www.mokoblue.com)