



ED001

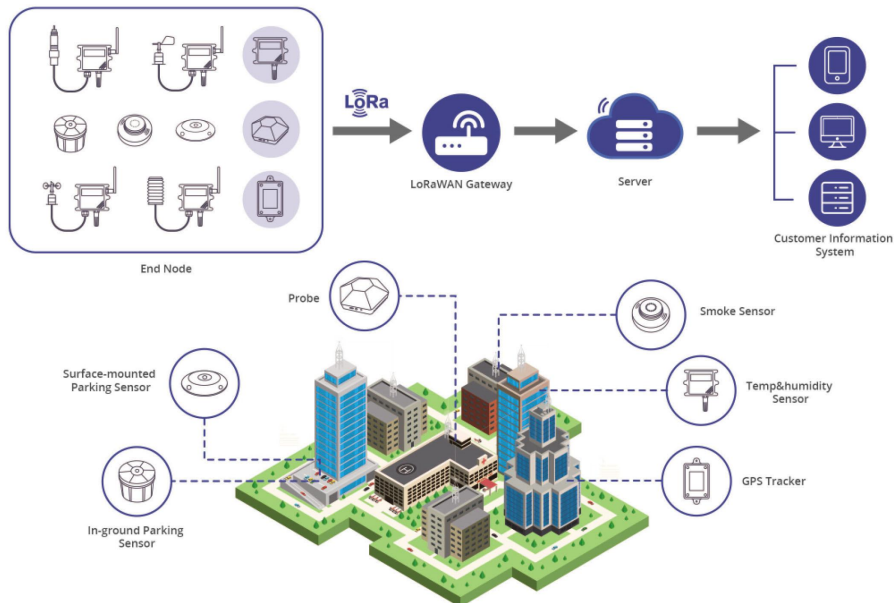
ED001 can detect and upload the temperature and humidity data to cloud server through WiFi/GPRS. ED001 has standard MOKO firmware which can connect to customer cloud platform.

Features

- Built in standard ESP-12F and SIM800C module, support WiFi and GPRS communication
- Wall-mounted waterproof shell, suitable for a variety of environmental occasions
- Built in MOKO standard firmware
 1. Support standard MQTT V3.1.1 protocol and TLS V1.2 transport layer encryption protocol
 2. Support standard MQTT servers, AWS IOT, Azure IOT HUB, Aliyun IOT
 3. Support API for APP and cloud server developing
 4. Firmware update Over The Air (OTA)
- Schematic diagrams are available for customers to develop firmware
- Support customized hardware with Zigbee, Z-wave, Bluetooth and other wireless type
- Support PM2.5, CO2, VOC sensor and etc.

Parameters

Model	ED001
Wireless Type	WiFi/GPRS
Input Voltage	8-26V DC
Max Transmit Power	WiFi: 3W GPRS: 11W
Operating temperature	-40°C ~ 80°C
Operating Humidity	0 ~ 80%RH
Temperature accuracy	±0.3°C (25°C)
Humidity accuracy	±2%RH
Dimension	110*85*42 mm



LORAWAN Probe



LW003-B

LW003-B is a LoRaWAN probe integrating LoRaWAN and Bluetooth wireless communication, LW003-B can scan BLE Beacon data and send data to LoRaWAN gateway, and then upload to server, so as to realize environmental monitoring and indoor positioning.

Features

- Support a worldwide LoRaWAN band plans
- Support ABP and OTAA mode
- Built in NRF52832 Bluetooth chip
- Firmware update Over The Air (OTA)
- Support both APP local configuration and server remote configure for device parameters
- Ultra Low Power, Max 1 month operating time (Data are reported once every 3 minutes)
- Low battery indicator
- Support for configuring uplink data intervals.

Parameters

Model	LW003-B
Frequency Bands	CN470/EU868/AU915/US915/AS923/ IN865/KR920/EU433/CN470/CN779
Protocol	LoRaWAN™ Protocol
Max Transmit Power	20dbm
Sensitivity	-142.5dBm@SF12 300bps
Power Supply	5000mAh chargeable battery
Operating Temperature	-40~+70℃
Operating Humidity	10%~90%
Dimension	123*109*36mm



LW001-BG

LW001-BG is a wireless smart and ultra-low power consumption LoRaWAN GPS Tracker.

Features

- Support a worldwide LoRaWAN band plans
- Support ABP and OTAA mode
- Support GPS positioning with accuracy within 2.5m CEP
- Built-in 9-Axis motion tracking sensor, support moving object detection
- Firmware update Over The Air (OTA)
- Ultra Low Power, Max 5-year operating time (Data are reported twice a day)
- Low battery indicator
- Support for configuring uplink data intervals

Parameters

Model	LW001-BG
Frequency Bands	CN470/EU868/AU915/US915/AS923/ IN865/KR920/EU433/CN470/CN779
Protocol	LoRaWAN™ Protocol
Max Transmit Power	19dbm
Power Supply	4000mAh non-chargeable battery
Positioning Mode	GPS, accuracy 2.5m CEP
Operating Temperature	-40~+70°C
Operating Humidity	10%~90%
Dimension	108.6*60*33.2mm



LW002-TH

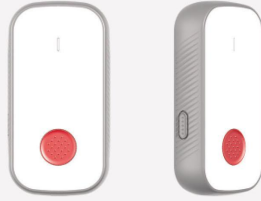
LW002-TH is a LoRaWAN temperature and humidity sensor for measuring indoor and outdoor environment, and it is easily deployed and configured.

Features

- Support a worldwide LoRaWAN band plans
- Support ABP and OTAA mode
- Built in SHT30 sensor with high reliability and long-term stability
- Firmware update Over The Air (OTA)
- Support both APP local configuration and server remote configure for device parameters
- Ultra Low Power, Max 10 year operating time(Data are reported twice a day) with battery
- Low battery indicator
- Support trigger alarm
- Support water pressure transmitter, water level monitor, wireless leak detector and etc.

Parameters

Model	LW002-TH
Frequency Bands	CN470/EU868/AU915/US915/AS923/ IN865/KR920/EU433/CN470/CN779
Protocol	LoRaWAN™ Protocol
Max Transmit Power	19dbm
Power Supply	12000mAh non-chargeable battery or 5-24V DC
Temperature and Humidity Tolerance	±0.2°C@ 0°C to 65°C ±2%RH@ 10-90%RH@25°C
Operating Temperature	-40~+80°C
Operating Humidity	10%~95%
Dimension	110*85*42 mm



LW004-PB

LW004 series is a LoRaWAN network IoT button specifically designed for both indoor and outdoor tracker objects. It is compact, mini and easy to use. LW004-PB is a panic button and it will send position information to server when it is triggered. It can be used in the emergency case for personal safety and alert notification.

Features

- Based on LoRaWAN™ Protocol
- Support GPS outdoor and BLE indoor geo-location
- Built-in vibration motor for alert
- Built-in 3-axis accelerometer for motion detect
- Low battery indicator
- Firmware update Over The Air (OTA)
- Support for configuring data by BLE or server downlink
- Support BLE master/slave mode

Parameters

Model	LW004-PB
Frequency Bands	CN470/EU868/AU915/US915/AS923/ IN865/KR920/EU433/CN470/CN779
Protocol	LoRaWAN™ Protocol
Power supply	Rechargeable battery
Motion detect	3-Axis accelerometer
Max Tx Power	19dBm
Waterproof	IP65
Operating Temperature	-40~+70°C
Operating Humidity	10%~90%
Dimension	75mm x 38.9mm x 15.5mm



MKGW2-LW

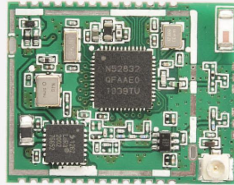
MKGW2-LW is 8 channel standard LoRaWAN gateway for indoor use. The gateway has a compact appearance and easy to install on the roof, wall and indoor environment. It can be widely used for smart factory, smart building, smart office and other IoT system.

Features

- Based on LoRaWAN™ Protocol
- Support WiFi AP hotspot access gateway
- WEB interface for related configuration and status view
- Support one key reset
- Support upgrade firmware by OTA or USB
- Easy for install
- Support Semtech UDP packet Protocol
- Compatible TTN server
- Support MQTT Protocol

Parameters

Model	MKGW2-LW
Frequency Bands	CN470/EU868/AU915/US915/AS923/ IN865/KR920/EU433/CN470/CN779
Protocol	LoRaWAN™ Protocol
WiFi Standard	IEEE 802.11b/g/n
Input Voltage	12VDC/POE 48V
Working Mode	Half-duplex
Channel	8
Max Tx Power	30dBm
Max Rx Sensitivity	-141dBm
Backhaul Connectivity	Ethernet/WiFi
Dimension	120mm x 120mmX22.5mm(not incl. antenna)



MKL62BA

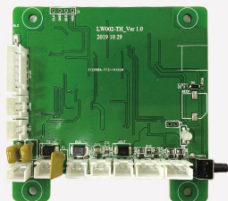
MKL62BA is a small size, low-power standard LoRaWAN module. The module integrates Semtech LoRa SX1262 and Nordic BLE nRF52832 chip. It supports a variety of digital interfaces, such as SPI, UART, I2C, GPIO, NFC and so on.

Features

- Based on LoRaWAN™ and BLE Protocol
- Built-in TCXO for improve high frequency stability and can be used for harsh environment in outdoor application
- Firmware update Over The Air (OTA)
- Support for AT command configuring
- Built-in BLE ceramic antenna and IPEX connector for outside antenna
- Support NFC function
- Low cost and low power consumption

Parameters

Model	MKL62BA
Frequency Bands	CN470/EU868/AU915/US915/AS923/ IN865/KR920/EU433/CN470/CN779
Protocol	LoRaWAN™ Protocol
BLE Protocol	4.2
Input Voltage	1.8~3.6V
Sleep Current	2uA
Max TX Power	20dBm
Main Interface	SPI, UART, I2C, GPIO, NFC
Package	34 pins, SMT
Dimension	24mm x 19mm



LW002

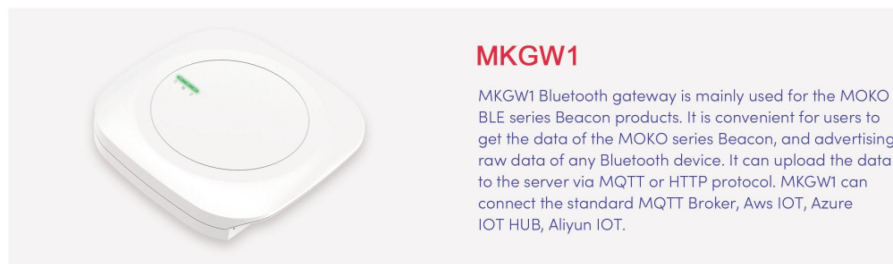
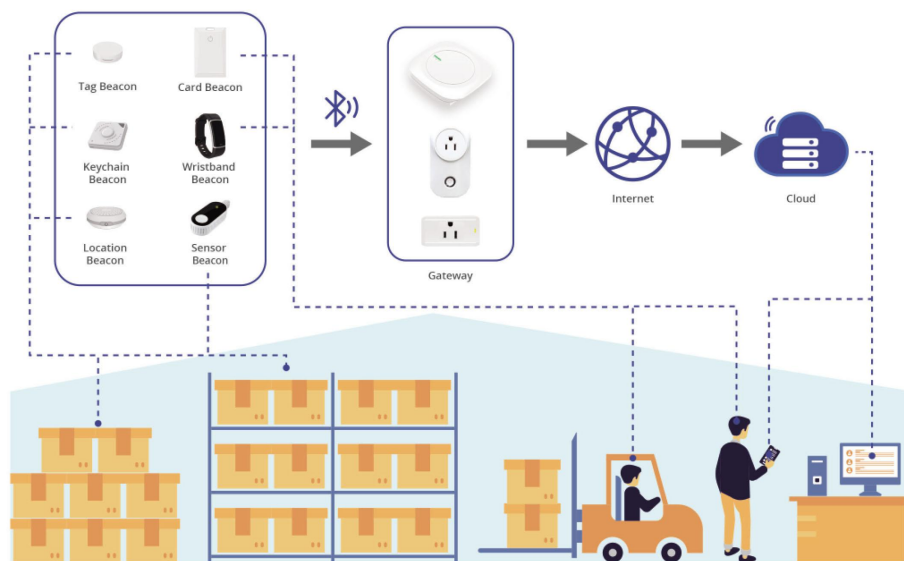
LW002 is a LoRaWAN sensor box that can collect different sensor data from variety of interfaces, like I2C, GPIO, ADC and RS485, then transfer the sensor data to server to realize the environment monitor.

Features

- Support a worldwide LoRaWAN band plans
- Support ABP and OTAA mode
- Firmware update Over The Air (OTA)
- Support both APP local configuration and server remote configure for device parameters
- Support variety of interfaces
- Low battery indicator
- Support trigger alarm
- Support water pressure transmitter, water level monitor, wireless leak detector and etc.

Parameters

Model	LW002
Frequency Bands	CN470/EU868/AU915/US915/AS923/ IN865/KR920/EU433/CN470/CN779
Protocol	LoRaWAN™ Protocol
Power Supply	3.7V lithium battery or 5~24V DC
Max TX Power	20dBm
Main Interface	I2C, GPIO, ADC and RS485
Dimension	78mm*75.5mm



Applications

- iBeacon&Eddystone&BLE raw data receiver
- MOKO Beacon receiver
- Asset tracking and control management
- Indoor Position&Location
- Proximity marketing
- Temperature&Humidity monitoring
- Personnel tracking
- Access control management
- Router

Specifications

Bluetooth	Bluetooth® 5.0 SDK (Nodic nRF52832)
Wi-Fi	IEEE 802.11b/g/n
Network	Ethernet & Wi-Fi
Power Supply	9V DC/5V USB/48V PoE
Dimension	120mm x 120mm x 22.5mm
Installation	Horizontal, Ceiling, Wall
Server Protocol	MQTT V3.1.1/HTTP
Bluetooth Scanning Range	150m
Scanning Capability	315 Bluetooth frames/s (Maximum)
Upgrade	OTA/USB disk
BLE scanning type	iBeacon/Eddystone/ Sensor Data/BLE Raw Data