Product Overview

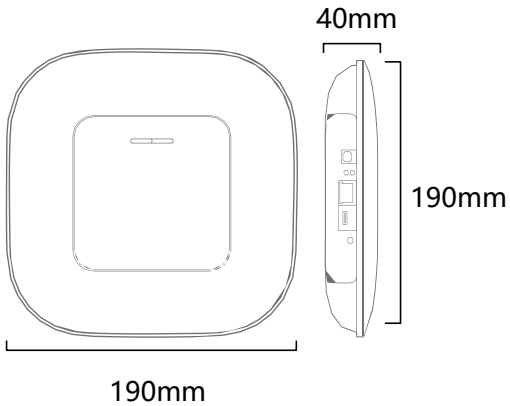
The **Ubibot LoRa Gateway GW1** is a high-performance, low-power IoT communication device that supports the LoRa wireless protocol. It features long-distance transmission and multi-device access capabilities. The gateway supports multiple networking methods—Wi-Fi, Ethernet, and 4G—making its configuration flexible and suitable for various complex deployment environments. Its stable data forwarding capability makes it an ideal core for building a LoRa wireless monitoring network.

When paired with a **Ubibot LoRa Sensor**, it enables remote collection and real-time monitoring of environmental parameters like temperature and humidity. The LoRa tag communicates with the GW1 gateway via the LoRa network, offering advantages such as low power consumption, long range, and strong penetration, making it especially suitable for scenarios that require long battery life and stable signal. The entire system supports remote management, data viewing, and data export via an app and a platform, helping users achieve efficient environmental monitoring and smart management.

Appearance introduction

Communication status indicator light
Left: network light,
Middle: status light
Right: LoRa communication light

Technical Parameters



- Work frequency: EU868 / US915 / AU915/ IN865/ RU864 / KR920 /AS923
- WiFi frequency 2.4GHz， Ethernet communication （10/100MMbps， Full-duplex/half-duplex auto-sensing)
- Router WiFi channel requirement:1-13
- Shell material: ABS material
- Device interface: 1*TypeC, 1*RJ45 interface
- Power supply: DC12V/1A power supply
- Dimensions: 190mm*190mm*40mm
- Storage space: 300000 data
- Some version support mobile network communication
- Device work environment: Temperature range -20℃~60℃; Humidity range 10~90%

UbiBot® LoRa Series

Product Overview

Low power consumption

Long range

No waring required

Strong anti-interference

High-capacity connections

Mutiple data upload method

Compatible LoRa Sensors

LoRa Sensor GS1-L
Wireless Transmission | LCD Screen | External Sensors

LoRa Sensor WS1 Pro-L
Wireless Transmission | LCD Screen | External Sensors

Data Collector DC1-L
Wireless Transmission | Multiple External Sensors Connections | Flexible Power Supply Options

Temperature and Humidity Sensor DC1-L-TH
Wireless Transmission | High Sensitivity | Ultra-long Battery Life

PT 100 Temperature Sensor DC1-L-PT
Wireless Transmission | Ultra-long Battery Life | Wide Temperature Range

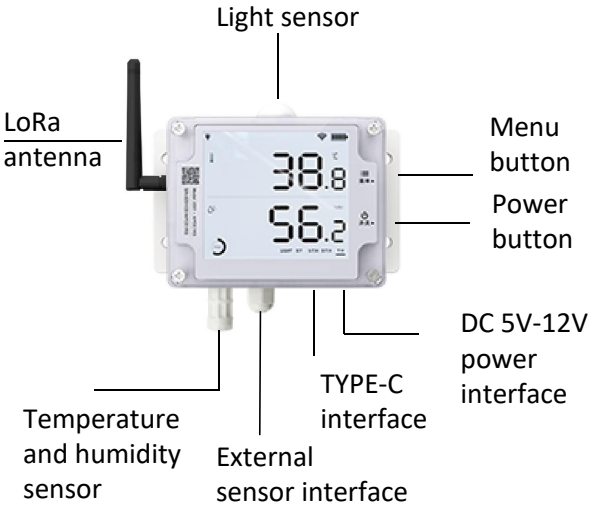
CO2 Sensor DC1-L-CO2
Wireless Transmission | Ultra-long Battery Life | Multiple Range Options

Atmospheric Pressure Sensor DC1-L-THP
Wireless Communication | Low Power Consumption | Atmospheric Pressure | Temperature | Humidity

LoRa Sensors Introduction

1. GS1-L

Appearance Introduction

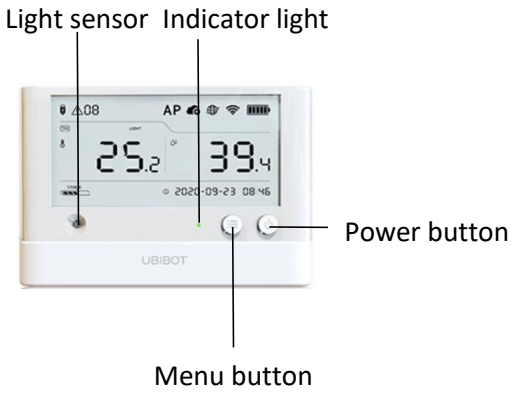


Technical parameters

- Dimensions: 152mm*90mm*55mm
- Weight: 462g±3
- Shell material: Flame ABS material+PC
- Screen Dimension： 4”LCD with black light
- Work frequency: EU868 / US915/ AU915/ IN865/ RU864/ KR920/ AS923
- Storage Space: 50000 data
- Power Supply: built- in2500mAh lithium battery / Type-C 5V / DC5V~12V
- Work Environment： Temperature： -20~60℃, Humidity： 10%~90% （No condensation）
- Range： Temperature： -20~60℃， Humidity： 0~100%RH，
  Light： 0~157k lux
- Accuracy： Temperature ： ±0.2℃ （0~60℃）
  Humidity ： ±2%RH （10~90%RH） Light： ±10%

2. WS1 Pro-L

Appearance Introduction



Technical parameters

- Dimensions : 126mm*86mm*22.5mm
- Weight : 143g±3(No battery)
- Shell material : Flame ABS material +PC
- Screen Dimension: 4.4-inch LCD screen
- Power Supply : 4 AA dry batteries /Micro USB Power supply(DC 5V/2A)
- Storage Space : 50000 data
- Work Environment : Temperature： -20~60℃,
- Humidity： 10%~90%
  Work frequency : EU868 / US915/ AU915/IN865/ RU864/ KR920/ AS923

3. DC1-L

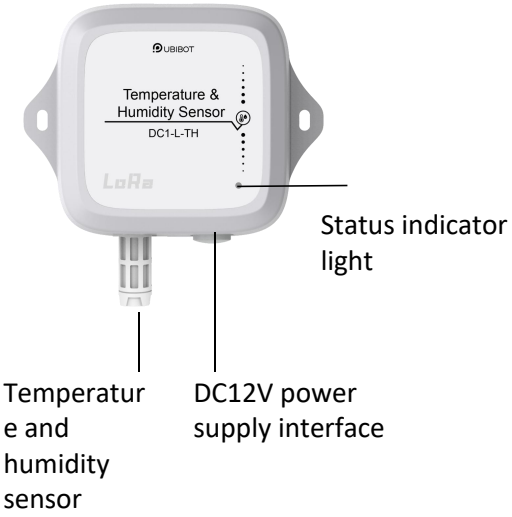
Appearance Introduction

Technical parameters

- Dimensions : 108mm*92mm*47mm
- Weight : 174g±3
- Shell material : Flame ABS material
- Storage Space : 50000 data
- Power Supply : 4 AA dry batteries / 4 lithium-ion batteries （ER14505） / lithium batteries / DC12V
- Work frequency： EU868 / US915/ AU915/ IN865/ RU864/ KR920/ AS923
- Work Environment : Temperature：-20~60℃， Humidity：10%~90%

4. DC1-L-TH

Appearance Introduction

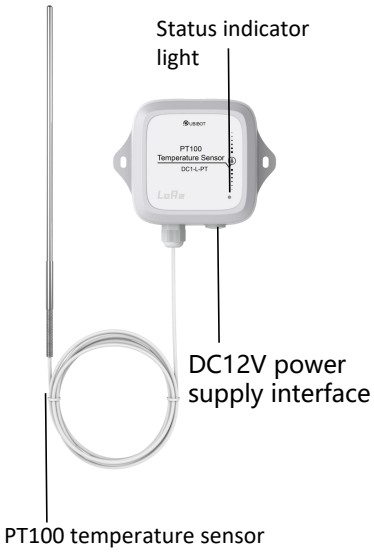


Technical parameters

- Dimensions : 108mm*92mm*47mm
- Weight : 151g±3
- Shell material : Flame ABS material
- Storage Space : 50000 data
- Power Supply : 4 AA dry batteries / 4 lithium-ion batteries （ER14505） / lithium batteries / DC12V
- Work Environment： Temperature：-20~60℃， Humidity： 10%~90% （No condensation）
- Work frequency： EU868 / US915/ AU915/IN865/ RU864/ KR920/ AS923
- Range：Temperature：-20~60℃ Humidity： 0~100%RH
- Accuracy： Temperature： ±0.2℃ （0~60℃） Humidity： ±2%RH （10~90%RH）

5. DC1-L-PT

Appearance Introduction

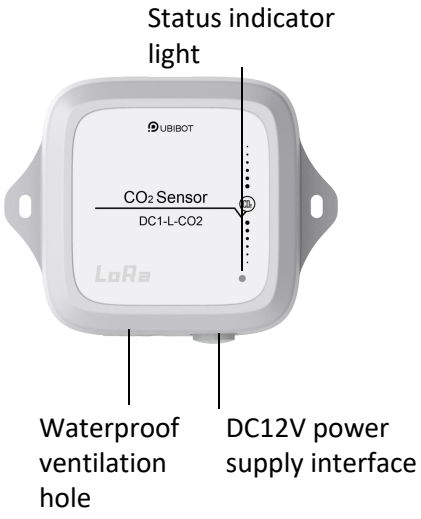


Technical parameters

- Dimensions : 108mm*92mm*47mm
- Weight : 230g±3
- Shell material : Flame ABS material
- Storage Space : 50000 data
- Power Supply : 4 AA dry batteries / 4 lithium-ion batteries （ER14505） / lithium batteries / DC12V
- Work frequency： EU868 / US915/ AU915/ IN865/ RU864/ KR920/ AS923
- Range：-200~600℃
- Accuracy：± (1℃+2%)

6. DC1-L-CO2

Appearance Introduction

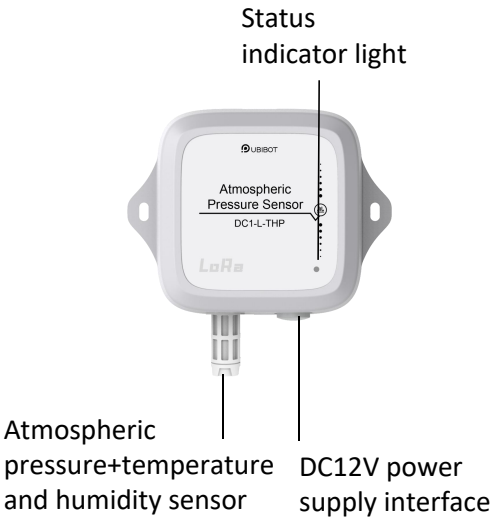


Technical parameters

- Dimensions : 108mm*92mm*47mm
- Weight : 151g±3
- Shell material : Flame ABS material
- Storage Space : 50000 data
- Power Supply : 4 AA dry batteries / 4 lithium-ion batteries （ER14505） / lithium batteries / DC12V
- Work frequency： EU868 / US915/ AU915/ IN865/ RU864/ KR920/ AS923
- Range： Effective range：400~10000ppm/400~2000ppm Maximum range：0~40000ppm/0~1000ppm
- Accuracy±： （30ppm+3%）/±(40ppm+3%)（Within effective range）

7. DC1-L-THP

Appearance Introduction



Technical parameters

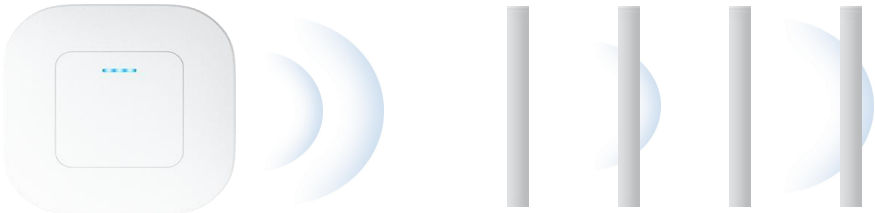
- Dimensions : 108mm*92mm*47mm
- Weight : 151g±3
- Shell material : Flame ABS material
- Storage Space : 50000 data
- Power Supply : 4 AA dry batteries / / 4 lithium-ion batteries （ER14505） / lithium batteries / DC12V
- Work frequency： EU868 / US915/ AU915/IN865/ RU864/ KR920/ AS923
- Work Environment : Temperature： -20~60℃， Humidity： 10%~90% （ No condensation ）
- Range：Atmospheric pressure：26~126kPa Temperature： -20~60℃ Humidity：0~100%RH
- Accuracy： Atmospheric pressure： ±50Pa Temperature ±0.2℃（0~60℃） Humidity： ±2%RH（10~90%RH）

Features

1. Long-range, Low Power Consumption

	LoRa	WiFi	4G	Bluetooth
Range	★★★ Long	★★ Medium	★★★ Long (depends on base stations)	★ Short
Latency	★★ Suitable for non-real-time applications	★ Low	★ Low	★ Low(simple tasks)
Data Throughput	★★ Low (small data packets)	★★★ High (large data transfer)	★★★ High (large data transfer)	★ Low (small data packets)
Power Consumption	★ Extremely low	★★★ High	★★★ High	★★ Low
Network Requirements	★ Gateway required	★ Full network coverage	★★★ Full network coverage (carrier-dependent)	★ Base station/phone required
Cost & Deployment	★ Low cost,large-scale use	★ High cost, indoor use	★★ High cost, data plan required	★ Low cost, small-scale use
Applications	★ Long-range, low power consumption	★ High bandwidth, short-range	★ High bandwidth, outdoor applications	★ Short range, low power consumption

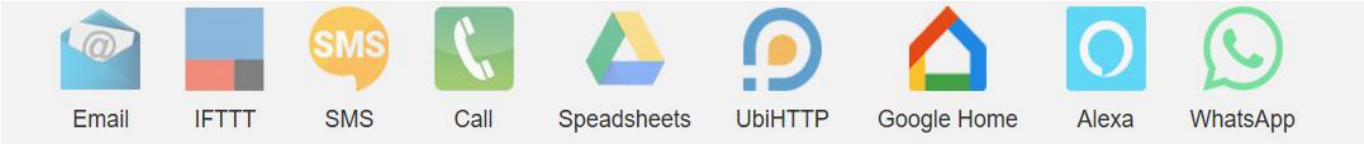
2. Line-of-sight Range of 1 Km, Capable of Penetrating 3-4 Walls
The Easy Connect LoRa Gateway GW1 utilizes LoRa spread spectrum technology, enabling stable wireless transmission up to 1 km in unobstructed line-of-sight environments. It also boasts excellent penetration capabilities, capable of stably penetrating 3 to 4 walls indoors, effectively ensuring signal continuity and data transmission stability.



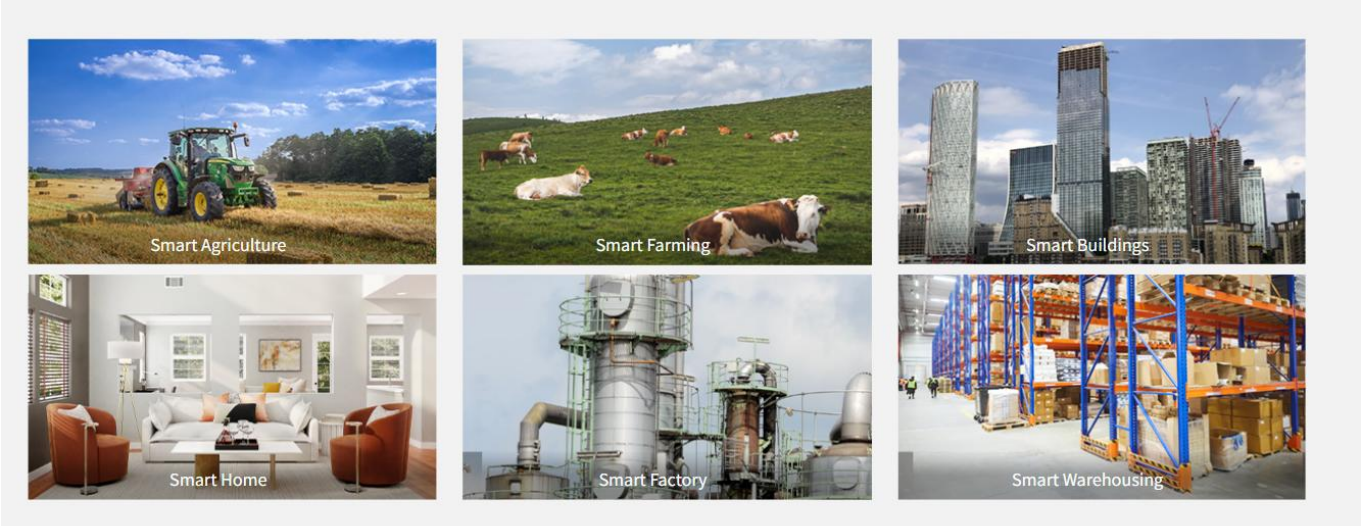
3. Long-distance Transmission Enables Easy Multi-point Monitoring.
The UbiBot LoRa Gateway GW1 supports stable connections up to 1 km and seamlessly connects up to 100 LoRa tags simultaneously, making it ideal for large-scale or multi-level monitoring scenarios.

4. Alert Mechanism

APP、SMS、Email、WhatsApp、Voice Call、HTTP



6.Application



UbiBot Cloud IoT Platform

Data Management: Easily manage all your smartwatch health data in one place with UbiBot's cloud platform. Add and connect multiple devices to a single UbiBot account, making it simple to track and monitor your health metrics.

Free App & Web Console: Access the UbiBot platform through our free app and web console. Enjoy a user-friendly interface with powerful features that provide in-depth analysis of your health data. Effortlessly track trends, compare metrics, and gain valuable insights.

Real-Time Health Alerts: Stay on top of your health with UbiBot's fully customizable alert system. Receive real-time notifications via App, Email, SMS, Voice call, Alexa, LINE Notify, WhatsApp, Command, HTTP whenever any health metric (e.g., heart rate, oxygen levels, body temperature) falls outside of your preset range. Stay informed and take action immediately if necessary.

Health Data Analysis: Analyze your health data to track trends, compare metrics, and gain personalized insights for better health decisions.

Automated Report: Automatic data reports generated in CSV, PDF, and HTML formats for easy tracking and analysis of your health metrics.