UBIBOT

Product Overview

The UbiBot WS4 is a device equipped with high-precision sensors for temperature and humidity, light intensity, CO2* levels, and more. It optionally supports satellite positioning for precise environmental monitoring and tracking. The device features an IP65-rated waterproof and dustproof design, ensuring stable and reliable performance even in changing environments. By connecting to Wi-Fi or mobile networks, the data is uploaded in real-time to the Ubibot platform, allowing you to view the environmental data on-site anytime and anywhere through the app or computer, enabling remote monitoring and intelligent management.

FEATURES

Flight mode	GPS Position	4G/Double channel WiFi
External Sensor	LCD Screen	Waterproof/ Dustproof

SPECIFICATIONS

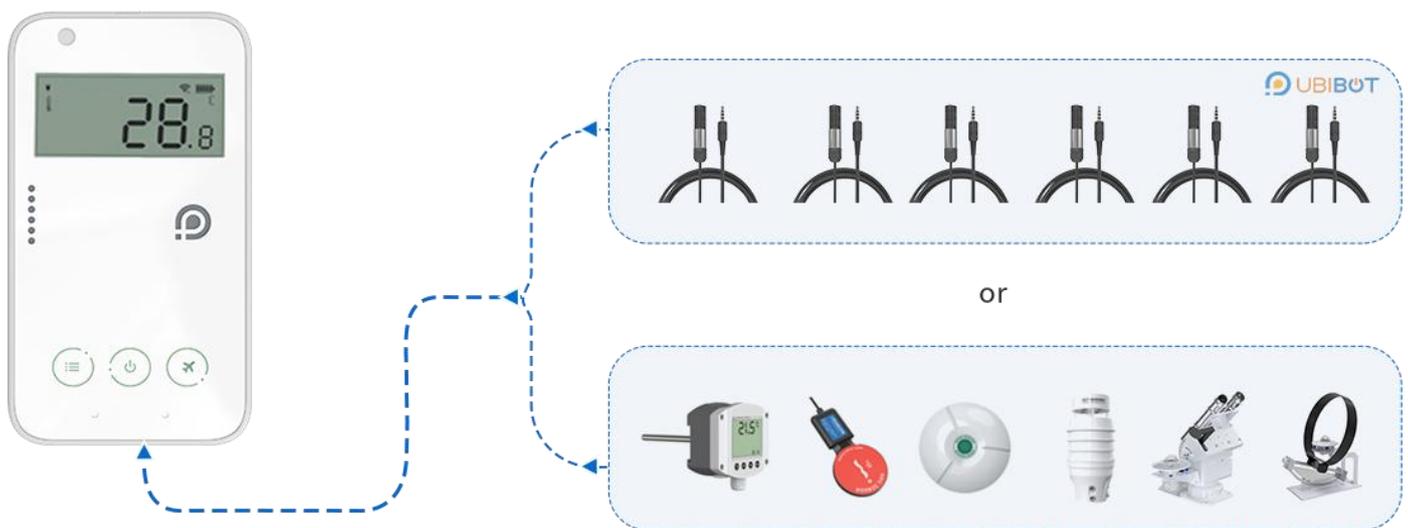| Technical Specifications	
Dimensions	70mm x 125mm x 25mm
Shell Material	Flame-retardant ABS
Screen Size	57 * 23mm LCD screen
Power Supply	Built-in 2500mAh lithium battery / Type-C 5V / 2A
Device Interface	Type-C
Protection Rating	IP65
Operating Environment	Temperature: -20~60℃, Humidity: 10%~90% (non-condensing)
Storage Capacity	300,000 data
Network Connectivity	WiFi 2.4G & 5G / 4G mobile network

Features marked * are model-dependent.

Internal and External Compatibility for Multi-Dimensional Data

The device features built-in high-precision temperature, humidity, light, CO2*, and accelerometer* sensors for real-time, accurate detection of environmental changes. It also supports external RS485 sensors, allowing users to flexibly expand monitoring capabilities as needed to obtain more comprehensive environmental data for multi-dimensional monitoring.

PT100   Atmospheric Pressure   Soil PH

Leaf Temp Humidity Sensor   Wind Speed   Air Temp & Humidity

Soil EC   Soil NPK   More

Universal Sensor Protocol for Flexible Expansion

The device features a built-in universal sensor access assistant, compatible with a wide range of RS485 sensors. Users can flexibly combine these sensors as needed, easily completing setup and configuration, and quickly collecting and displaying diverse sensor data. It supports simultaneous access to multiple sensors of the same type (e.g., 6-channel temperature sensor), as well as proprietary sensors that meet the protocol, such as those for water quality, gas, soil moisture, and weather conditions.
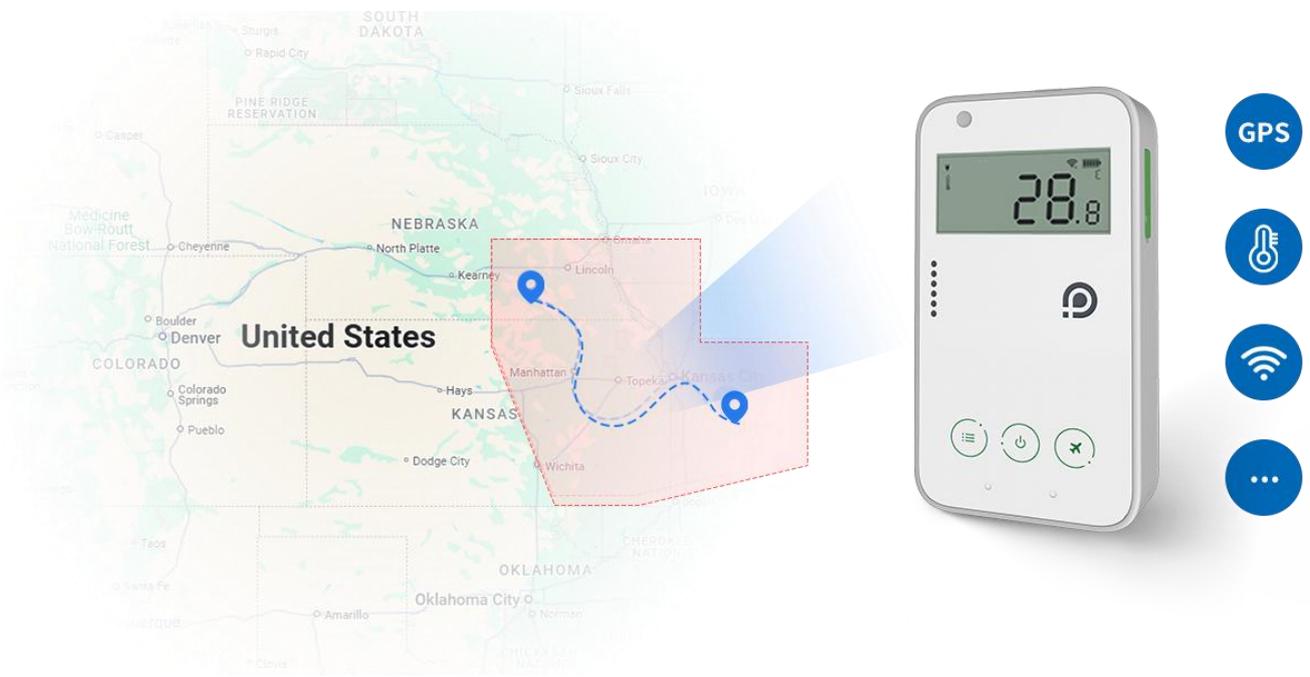

or

Offline Data Resume, Worry-Free Data

With 300,000 data records stored locally, the device supports offline data transmission. Even without a network connection, the device can continue recording data. The built-in storage chip can store a large amount of data, and once the network is restored, it automatically uploads the data to the cloud, ensuring data integrity and security.

Satellite Positioning, Track Visualization

Equipped with advanced integrated positioning technology, the device can real-time monitor temperature and humidity data as well as the vehicle's location, accurately recording its movement trajectory. The data is then uploaded to the cloud platform in real-time via WiFi or mobile network, enabling comprehensive and visual monitoring and management of the entire transportation process.

More Reliable Waterproofing, More Flexible Installation

The device features an IP65 waterproof and dustproof design, along with a unique waterproof diversion structure that effectively resists rainwater and dust intrusion. It supports two installation methods: magnetic mounting and wall mounting, making it easy to adapt to different usage scenarios and ensuring convenient installation.

Type-C Power Supply

2500mAh Battery Power Supply

Versatile Installation, Compatible with Different Refrigerated Boxes

The device can be flexibly deployed to accommodate different types of refrigerated boxes, meeting the needs of various scenarios. It offers two installation options: magnetic mounting and screw fixation, making it easy to adapt to various packaging and usage environments, ensuring stable and reliable data monitoring.

Embedded Installation: For foam box grooves, the device can be quickly installed using a magnetic piece, making it easy to remove and reinstall.

Fixed Installation: The device is securely attached to a rigid insulated box with screws, ensuring a firm and reliable installation that is less likely to be lost.

Platform and APP

The UbiBot WS4 Temperature and Humidity Data Logger to the IoT big data cloud platform via WiFi (2.4GHz & 5GHz) or 4G mobile network. It collects, monitors, and uploads data from multiple sensors, including temperature, humidity, and light intensity, in real-time. When the monitored data triggers a preset threshold, the device automatically increases the data collection and upload frequency, quickly reporting any abnormalities. Users can view and monitor the data in real-time on multiple devices, such as smartphones, tablets, and computers, enabling more intelligent risk alerts.

Cloud Platform PC
PDF Report Export / Custom
Calibration / Open API

UbiBot Connect App Multi-Device Control / Multi-User Notifications / Data Sharing

Product Function Comparison

	WiFi connection	4G connection	Temperature, humidity and light monitoring	CO$_2$ monitoring	Vibration monitoring	GPS positioning
WS4-A	Support 5G+2.4G	/	Support	/	/	/
WS4-A4G	/	Support	Support	/	/	/
WS4-A1RS	Support 5G+2.4G	/	Support	/	Support	/
WS4-A4G1RS	/	Support	Support	/	Support	/
WS4-P4G1RA	/	Support	Support	/	Support	Support
WS4-A1RS1C	Support 5G+2.4G	/	Support	Support	Support	/
WS4-A4G1RS1C	/	Support	Support	Support	Support	/
WS4-P4G1RS1C	/	Support	Support	Support	Support	Support

Application

Pharmaceuticals and vaccines

RV monitoring

Cold chain transportation

Cold storage warehouses

Fresh food

Agricultural greenhouses