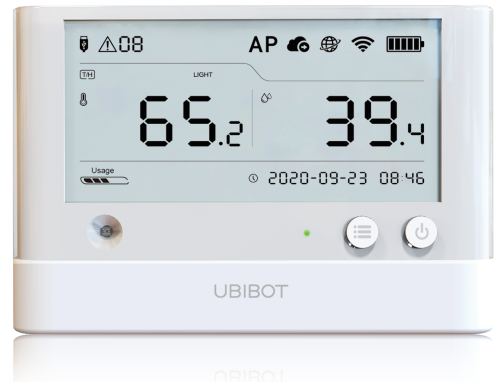# WS1 Pro-SIM
Wireless Smart Sensor

UbiBot ® WS1 Pro - WIFI AND SIM VERSION is a cloud-based environmental monitoring data logger. With its built-in sensors, it detects and measures temperature, humidity and ambient light.

UbiBot ® WS1 Pro - WIFI AND SIM VERSION has WiFi and mobile GPRS/3G/4G network 2 types of connection. A mobile GPRS/3G/4G network provides internet connection when WiFi is not available. It syncs data to the UbiBot IoT cloud platform, giving you remote access to both real-time and historical data through the UbiBot App or Web Console platform, helping you to monitor the environment from anywhere in the world and receive real-time alerts.

We provide a UbiBot Global SIM card for each device for free.

With a 4.4" high-quality LCD screen, UbiBot WS1 displays current environmental conditions and shows any alerts and notifications in real time.

It has two on-board USB ports; with splitters, it can connect 2 x DS18B20 temperature probe and 1 x RS485 probe at a time, and can be connected simultaneously with the external power source.

FEATURES

· Temperature, humidity, and ambient light monitoring
· 2.4 GHz WiFi and mobile GPRS/3G/4G 2 types of network connection, no need of hubs or gateways; a free UbiBot Global SIM Card is included
· 4.4" high-quality LCD screen displaying current environmental conditions
· Free App & Web Console to access and monitor real-time data remotely, no subscription fee
· Unlimited UbiBot cloud storage for historical data; free historical data export
· Multiple ways of real-time alerts: App notifications, emails, phone calls, SMS, HTTP
· Working with IFTTT, Google Sheet, Alexa
· 2 x DS18B20 external temperature probe and 1 x RS485 probe is supported
· Easy setup with free UbiBot App or PC tools
· Memory with a capacity of 300,000 records stores all data even if the network is temporarily disconnected, which ensures there are no gaps in the data history.
· 2 types of power supply: AA batteries and external power supply
· Compliance with CE, EN 12830, FCC, FDA CFR21, IC, RCM, RoHS, TELEC
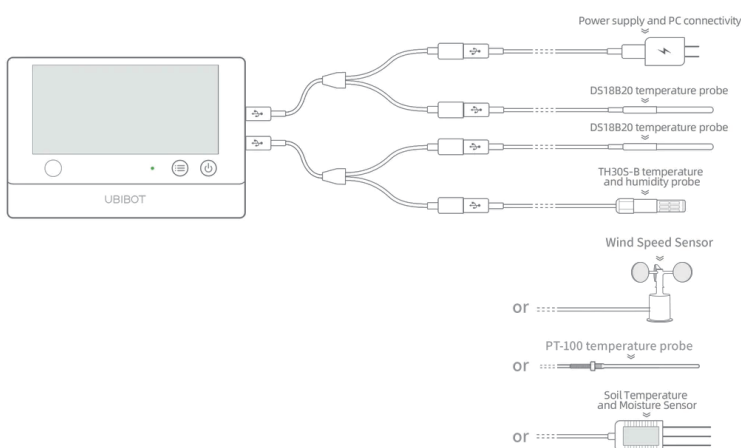
NOTE:

- UbiBot WS1 Pro is **not waterproof**. The optimal operational environment is 10% to 90% RH. Long-term exposure to a high-humidity environment, over 90% RH, may cause damage to the device.

- If the device is used in continuously high humidity, over 90% RH, we suggest using the **UbiBot water-resistant case** and connecting external probes.

- For WiFi connection, WS1 Pro SIM can work with a **2.4 GHz WiFi network or 2.4/5 GHz mixed network**. 5 GHz WiFi is not supported.

- We provide a free UbiBot Global SIM Card for each UBIBOT WS1 Pro SIM device.

EXTERNAL PROBES & ACCESSORIES

We provide a free UbiBot Global SIM Card for each UbiBot ® WS1 Pro - SIM device.
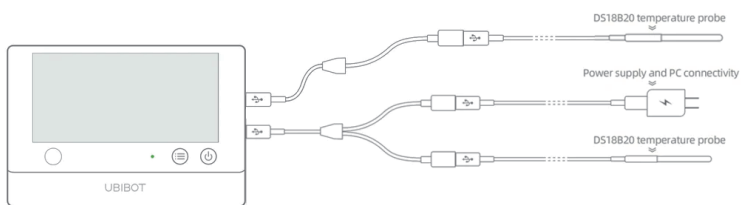
WS1 Pro - SIM has two Micro USB ports for connecting external probes or USB power supply.

- Each Micro USB port supports 1 x DS18B20 temperature probe.

- The lower Micro USB port also supports the following RS485 probes:

  TH30S-B Air Temperature and Humidity Probe
  Soil Temperature and Moisture Sensor
  PT 100 Industrial-grade Temperature Probe
  Wind Speed Sensor

- Splitters may be needed when you connect multiple external probes and external USB power supply at the same time.

External Probes

· DS18B20 Temperature Probe

· TH30S-B Air Temperature and Humidity Probe

· Soil Temperature and Moisture Sensor

· PT 100 Industrial-grade Temperature Probe
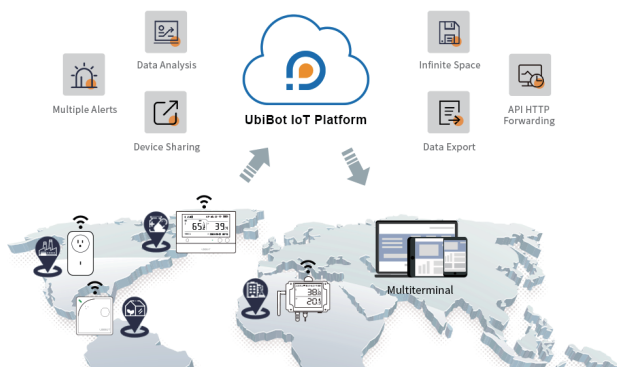
· Wind Speed Sensor

Accessories

· Micro USB Splitter

· Water Resistant Case for Outdoor Use

· UbiBot Global SIM Card (We provide a free UbiBot Global SIM Card for each SIM version device)

NOTE: For RS485 probe, only one of each type can be connected at a time.

SPECIFICATIONS

Technical specifications	
Temperature	-20℃ to 60℃(-4℉ to 140℉)
Humidity	10% to 90%, No condensation
Ambient light	0-83k lux
Accuracy	Temperature ±0.3 ℃, Humidity ±3%, Ambient light ±2%
Memory	300,000 sensor records
Network connection	
WiFi	2.4GHz or 2.4/5GHz, channels 1-13 (5GHz WiFi NOT supported)
Mobile networks	LTE-FDD:B1/B2/B3/B4/B5/B7/B8/B12/B13/B18/B19/ B20/B25/B26/ B28/B66;LTE-TDD:B34/B38/B39/ B40/B41;WCDMA:B1/B2/B4/B5/ B6/B8/B19;GSM:850/900/1800/1900 MHz
Physical specifications	
Materials	Flame resistant ABS & PC
Dimensions	12.6 x 8.6 x 2.25 cm
Weight	143 g ± 3 g
Colour	White
Screen	10.4 x 5 cm (4.4'')
Ports	2 x Micro USB; USB 2 is embedded with RS485 interface
Power Source	4 x AA batteries / Micro USB(5V/2A)
External probes	
External probes	2 x DS18B20 Temperature Probe, 1 x RS485 probe (TH30S-B/Soil probe/PT-100/Windspeed sensor, a Micro USB Splitter may be needed)

UbiBot Cloud IoT Platform

Data Management: Manage all your IoT data in one place; you could add as many devices as you want to one UbiBot account.

Unlimited Storage: Unlimited cloud-based storage ensures you will never run out of space. This allows you to view all your historical data via UbiBot App or Web.

Free App & Web Console: Using **UbiBot App** and **Web Console** is free. Powerful and thoughtful features provide you brilliant experience.

Analysis and Visualization: Use powerful analysis and visualization tools to get the most out of your data; spot trends and direct comparisons.

Real-Time Alerts: Fully customizable alert system will notify you via **App notifications, emails, phone call/SMS, HTTP** whenever any metric goes out of the range preset.

Highly Secure Platform: UbiBot IoT platform is designed to keep all your data secure so you never have to worry about hackers or other security issues.

Third-Party Services: Working with **IFTTT, Alexa, Google Assistant, Google Sheet**

Compliant with FDA CFR21