

# WS1 Pro-WiFi Wireless Smart Sensor

UbiBot <sup>®</sup> WS1 Pro is a cloud-based environmental monitoring data logger. WS1 Pro' built-in sensors detect and measure temperature, humidity, and ambient light. Via a WiFi connection, it syncs data to the UbiBot IoT cloud platform, which gives you access to both real-time and historical data through the UbiBot App or Web Console platform anywhere in the world and allows you to receive real-time alerts.



With a 4.4" high-quality LCD screen, it 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 to the external power source.

### **FEATURES**

- · Temperature, humidity, and ambient light monitoring
- · 2.4 GHz WiFi network connection, no need of hubs or gateways
- · 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 receiving real-time alerts: App notifications, emails, phone calls, SMS, HTTP
- · Working with IFTTT, Alexa, Google Assistant, Google Sheet
- $\cdot$  2 x DS18B20 external temperature probe and 1 x RS485 probe is supported
- · Easy setup with free UbiBot App or PC tools
- $\cdot$  Memory with a capacity of 300,000 records stores all data even if WiFi 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 can work with a 2.4 GHz WiFi network or 2.4/5 GHz mixed network.
5 GHz WiFi is not supported.

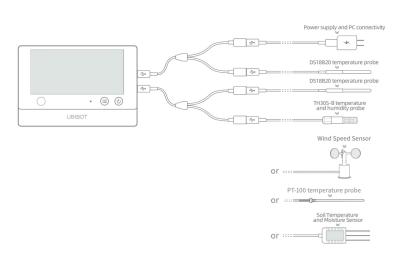


#### **EXTERNAL PROBES & ACCESSORIES**

UbiBot WS1 Pro has two Micro USB ports for connecting external probes or USB power supply.

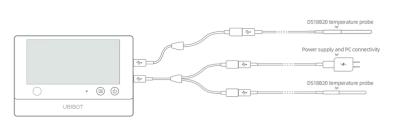
- Each Micro USB port supports 1 x DS18B20 temperature probe.
- The lower Micro USB port also supports the following RS485 probes: TH30S-B Air Temperature and Humidity Probe
   Soil Temperature and Moisture Sensor
   PT 100 Industrial-grade Temperature Probe
   Wind Speed Sensor

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



### **External Probes**

- · DS18B20 Temperature Probe
- $\cdot$  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
- $\cdot$  Water Resistant Case for Outdoor Use

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



### **SPECIFICATIONS**

Technical specifications	
Temperature	-20℃ to 60℃(-4°F to 140°F)
Humidity	10% to 90%, No condensation
Ambient light	0-83k lux
Accuracy	Temperature ±0.3 °C, 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)
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	2xDS18B20 Temperature Probe, 1 x RS485 probe (TH30S-B/Soil probe /PT-100/Wind speed 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