

UbiBot <sup>®</sup> GS2-sim is a wireless EC & PH value remote monitoring device, specially designed for the agricultural hydroponic industry.

GS2-sim includes 1 x DS18B20 external temperature probe, 1 x EC probe, 1 x PH probe, and has a built-in ambient light sensor. It supports WiFi and mobile GPRS/3G/4G 2 types of connection. A mobile GPRS/3G/4G network provides internet connection when WiFi is not available.

Once configured with network connection, GS2-sim measures the temperature, EC and PH value of the liquid, and syncs data automatically to UbiBot <sup>®</sup> IoT cloud platform, allowing you to access data and monitor the environment remotely from anywhere in the world via the free UbiBot APP or Web Console and to receive real-time alerts.



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

There are on-board knobs for the EC/PH probes accuracy calibration.We also provide and recommend automatic calibration that you can perform yourself using the UbiBot Web Console.

GS2- is industrial grade, IP65 dustproof and water-resistant for harsh environment.

### **FEATURES**

· 1 x DS18B20-Audio Temperature Probe, 1 x EC probe, 1 x PH probe, built-in ambient light sensors

 $\cdot$  2.4 GHz WiFi and mobile GPRS/3G/4G 2 types of connection, no need of hubs or gateways; a free UbiBot Global SIM Card is included

- · Industrial-grade shell, strong and durable; IP65 water-resistant for outdoor use
- $\cdot$  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
- · Easy setup with free UbiBot App or PC tools

 $\cdot$  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.

 $\cdot$  Three types of power supply: internal lithium battery, Type-C 5V (USB cable provided), and DC 12V (not included)

# **EXTERNAL PROBES & ACCESSORIES SUPPORTED**

- $\cdot$  1 x DS18B20 DS18B20-Audio Temperature Probe, 1 x EC probe, 1 x PH probe are already included. The device can't support any other probes.
- · UbiBot Global SIM Card (We provide a free UbiBot Global SIM Card for each SIM version device)
- · Solar Cell Panel (Optional)
- · 12V Power Adapter (Optional)

#### NOTE:

- When the device is connected to external power supply, PH readings may fluctuate slightly.
- To achieve high accuracy, we recommend to calibrate the EC and PH probes before use.
- For WiFi connection, GS2 can only work with a 2.4 GHz WiFi network. 5 GHz WiFi is not supported.
- GS2 is IP 65 waterproof, but not resistant to high humidity over 90%.



### **SPECIFICATIONS**

Technical specifications	
External DS18B20 Temperature Probe	-55°C to 125°C
Ambient light	0-83k lux
РН	0-14 PH
EC	2-20000 μs/cm
Accuracy	Temperature $\pm$ 0.5 °C; ambient light $\pm$ 2%; PH $\pm$ 0.1 PH; EC $\pm$ 2 F.S
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/B26/28/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	11.5 x 9 x 5.5 cm
Weight	450g ± 3 g
Colour	White
Screen	4" LCD with backlight
Ports	1 x Type-C; 1 x 3.5 mm Audio (DS18B20); 1 x EC port; 1 x PH port
Power Source	Internal Lithium batteries (2900 mAh); Type-C 5V (USB cable included); DC 12V (not included)
External probes	
External probes	1 x DS18B20 temperature probe, 1 x PH probe, and 1 x EC probe are already included

# **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