UbiBot GS2-EL
Industrial-Grade WIFI Monitoring IoT System / Logger for Liquid Quality (pH, EC, Ambient Light, Temperature)

Model: UBIGS2EL
Manufacture warranty: 12 months
Country of Origin: China

Descriptions

UbiBot ® GS2-EL is a wireless EC & PH value remote monitoring device, specially designed for the agricultural hydroponic industry.

GS2-EL includes 1 x DS18B20-Audio Temperature Probe, 1 x EC probe, 1 x PH probe, and has a built-in ambient light sensor. Once configured with WiFi connection, GS2-EL measures the temperature, EC and PH value of the liquid, and syncs data automatically to UbiBot ® 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.

There are on-board knobs for the EC/PH probes accuracy calibration.

We also provide and recommend do-it-yourself automatic calibration that you can perform using the UbiBot Web Console.

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

Features

- 2.4 GHz WiFi connection, no need of hubs or gateways
- Industrial-grade shell, strong and durable; IP65 water-resistant for outdoor use
- 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, SMS, HTTP
- 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.
- Three types of power supply: internal lithium battery, Type-C 5V (USB cable provided), and DC 12V (not included)
- Compliance with CE, EN 12830, FCC, FDA CFR21, IC, RCM, RoHS, TELEC

Note:
To achieve high accuracy, we recommend to calibrate the EC and PH probes before use.
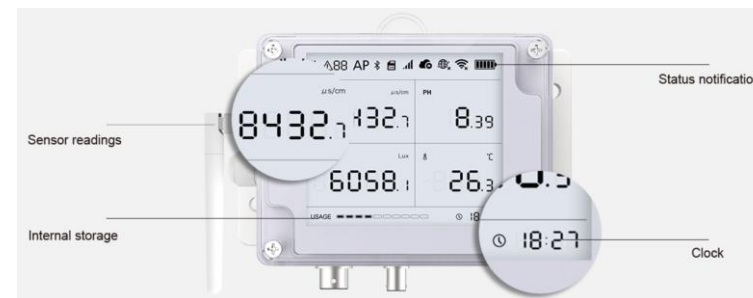
UbiBot GS2 PH probe calibration for alkaline liquid:
https://www.youtube.com/watch?v=eVNF-nos3VE
UbiBot GS2 PH probe calibration for acid liquid:
https://www.youtube.com/watch?v=QWUcmQnee7w
UbiBot GS2 EC probe calibration introduction:
https://www.youtube.com/watch?v=ilG5IbfXFIQ

Package List

- 1 x GS2 Monitor with external antenna
- 1 x DS18B20 Temperature Probe
- 1 x EC probe
- 1 x PH probe
- 1 x Manual book
- 1 x Type-C USB cable

Specification:

	Measurment Range	Accuracy	Resolution
Ambient light (Bulit in GS2)	0-83,000 lux	±2% over 40 lux, ±5% within 40 lux	0.1 Lux
DS18B20 Temperature Probe (External)	-55 ℃ to ~125 ℃	± 0.5℃	0.1℃
pH Probe (External)	0 – 14 PH	± 0.1PH	0.01 PH
EC Probe (External)	2 to 20000 µS/cm	± 2&F.S	0.1 µS/cm

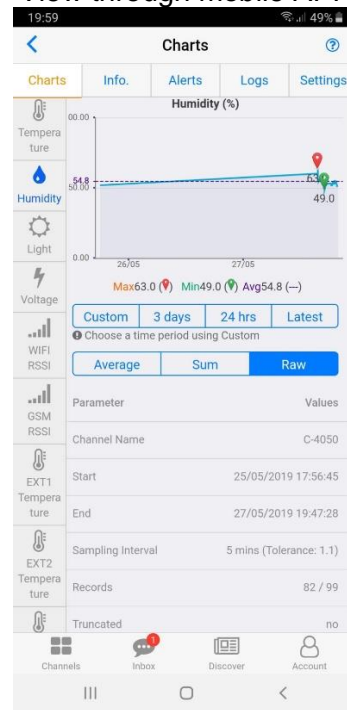|	
Display Screen	4.4" LCD with backlight (7.7cm * 6.75cm)
Wifi informaiton	Supports 20MHz or "Auto" setting supports OPEN, WEP, or WPA/WPA2 types, WPA2-Enterprise (802.1x / RADIUS authentication) network is not supported, requires **2.4GHz** (802.11 b/g/n), channels 1-13 **(5GHz WiFi NOT supported)**
IP Rating	IP65 water-resistant
Memory	300,000 sensor records
Power Source	Internal Lithium batteries (2900 mAh); Type-C 5V (USB cable included); DC 12V (not included)
Standby time	3 months (wifi only)
Prompt tones	Voice guide
Materials	Flame-resistant ABS + PC
Dimensions	11.5 x 9 x 5.5 cm
Weight	450g

UbiBot Cloud IoT Platform

The cloud-based IoT platform offers advanced data analysis and management. It also allows you to setup real-time notifications - if a metric goes outside the range you specify, the platform will notify you through the app, by email or other methods, allowing you to respond promptly before costly damage happens. The IoT platform gives users access to both the real-time data and history via our mobile app or on any browser. We are now working with IFTTT (if this then that), allowing you to build custom link with other smart devices.

The data sync interval can be set by you. This allows you to balance battery life against frequency of data capture. With the default data sync interval of 15 minutes the device has a battery life of up to 4- 6 months using 2 AA alkaline batteries. Power-supply using Micro-USB is supported. You can check the battery voltage of the device remotely and set up rules to be notified when low-battery, network failure or sensor reading exceeds the setting range. Available rule alerts include Email, APP. Please note, charges may apply to SMS text and voice call alert modes. These two modes cost the balance of the credits in your account.

No subscription is needed. Free 200MB Cloud Storage enough to store data over 2 years on default settings. Export the data to CSV or PDF without extra charge.

View through mobile APP

Data download in CSV format

created_at	field1 (Temperature ºC)	field2 (Humidity)	field3(Light)	field4(Voltage)
2019-05-27T15:28:08+08:00	25.88121	60	81.639999	5
2019-05-27T15:28:10+08:00	25.894562	60	76.439995	5
2019-05-27T15:28:12+08:00	25.937286	61	76.919998	5
2019-05-27T15:28:14+08:00	25.937286	61	79.5	5
2019-05-27T15:28:15+08:00	25.96666	62	77.799995	5
2019-05-27T15:28:16+08:00	25.96666	62	75.919998	5
2019-05-27T15:28:18+08:00	26.006714	62	76.860001	5
2019-05-27T15:28:19+08:00	26.022736	62	77.720001	5
2019-05-27T15:28:25+08:00	26.121536	63	78.540001	5
2019-05-27T15:28:47+08:00	26.404594	60	97.439995	5
2019-05-27T15:28:51+08:00				
2019-05-27T15:29:47+08:00	26.615547	58	78.939995	
2019-05-27T15:30:47+08:00	26.658272	58	86.559998	
2019-05-27T15:31:47+08:00	26.700996	57	96.839996	
2019-05-27T15:32:47+08:00	26.700996	57	84.479996	
2019-05-27T15:33:47+08:00	26.743721	57	83.279999	

View dashboard through PC

Widely used in liquid test

Deploy the Ubibot GS2 and its EC, PH probes in the use environment, such as hydroponic farm, aquarium, sewage pool, laboratory, people can easily view the real-time data in the monitoring center. Then download the daily, or monthly report for periodic analysis. It makes unattended monitoring much easier but more accurate.