

USER MANUAL



LPG-2412

Tank Level Monitor

1. OVERVIEW

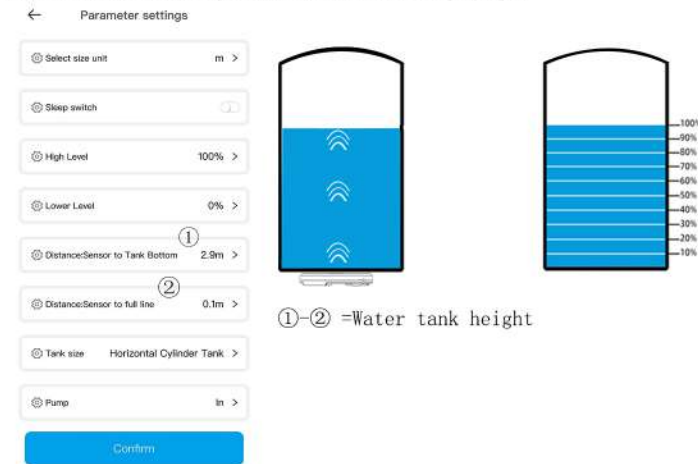
Thank you for purchasing the Bottom Mount Wifi Ultrasonic Level Sensor. This ultrasonic level sensor measures liquid level without touching the liquid and without opening a hole in the tank. The sensor is mounted on the bottom of the container and emits ultrasonic pulses upward. After the pulses pass through the liquid medium to the liquid surface, they are reflected back to the sensor receiver, thereby determining the liquid level.



- ◆ Can be used for various liquids, since the ultrasonic sensor does not result in direct liquid contact
- ◆ Detect Range: 4cm to 1m
- ◆ High and Low liquid alarm function
- ◆ Ideal for water/oil tanks
- ◆ One mobile phone can monitor multiple water tanks in one time, Or one sensor can be monitored by multiple mobile phones in one time.

4. SETTING

After successful configuration, enter the settings page



1) Select size unit

It comes in four size units, please choose the one you need.

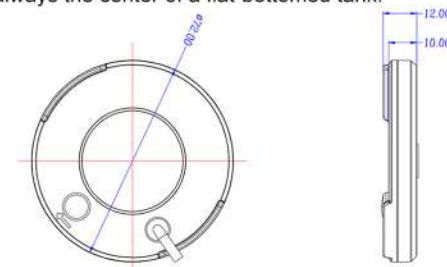


2) Sleep Switch

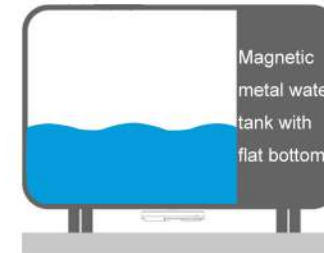
This Function is not available yet

2. INSTALLATION TIPS

The sensor has a diameter of 72mm and a built-in magnet that can be attached to the bottom of the water tank. To get the most accurate readings, the best position is always the center of a flat-bottomed tank.



2.1) Make sure the water tank can absorb the magnet and the bottom installation position is flat without curvature and the tank is free of suspended matter and sediment.



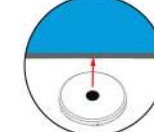
2.2) Clean the mounting area on the bottom to ensure the surface is smooth and flat.



2.3) Take out the glue and apply it on the black sonar rubber circle. (100% coverage)



2.4) Immediately attach the sensor to the mounting area.



3) Setting the water tank height

①-②=Water tank height

Note: The value of setting ① minus setting ② equals the height of your water tank. The height of the water tank will affect the liquid level ratio, high and low liquid level alarms, etc. so please set the value according to the actual height of your water tank.

4) Set Max for full level alarm

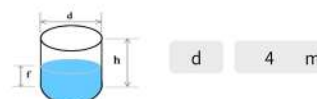
5) Set Min for low level alarm

6) Set tank size

It has 7 tank types.

Select the type of tank you are using and set the tank size, the system calculates the real-time volume based on these values and the depth of the water.

Vertical Cylinder Tank



$$V = \pi(d/2)^2f, \text{ when } d=4m, f(\text{depth})=2.3m, V=28902.65L$$

7) Pump

This Function is not available yet

3. CONNECTION (Wi-Fi)

3.1) Download and Open the "Tank IoT" App available from Apple and Google Play App stores.



3.2) After the sensor is powered on, LED on sensor:

Red LED :Power on/off

Green LED :

·Flashing: WiFi (2.4GHz) Connecting;

·Always On: WiFi (2.4GHz) Connected successfully

Blue LED: Get probe data

Button:

·Short press : Device reboot;

·Long press(Green LED light flashes quickly): Clear WIFI distribution network

3.3) Wi-Fi Connection:

3.3.1) Turn on the Bluetooth and Wifi on the mobile phone and open the Tank IoT App

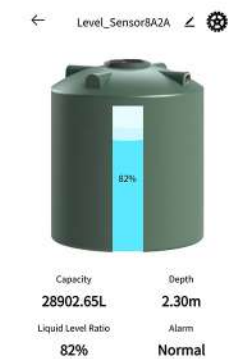
Note: WIFI frequency can only be 2.4GHz, not 5GHz;

8) Confirm

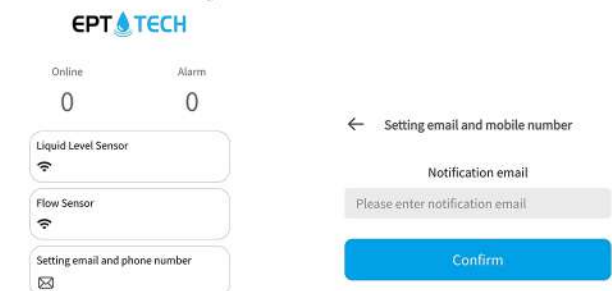
After setting the data, click confirm, It won't save data if not confirmed.



9) Setup Complete



10) Alarm Notification Settings



a. Back to home page click

"Setting email and phone number"

b. Enter your email account

When adding device, make sure that the sensor and the mobile are connected to the same WIFI. After setting, the sensors must work under Wi-Fi. If the mobile phone can't find the device or fails to connect the device, please clear the distribution network (long press the button for 3 seconds until the green LED flashes), and then repeat the steps to add sensors, or put the sensor close to router and try again.



a. Click liquid level sensor



b. Click "+" to Search Device



c. Choose and click add



d. Enter WiFi account password



e. After clicking "OK", start configuration



f. Successfully connected