

User Manual



1. OVERVIEW

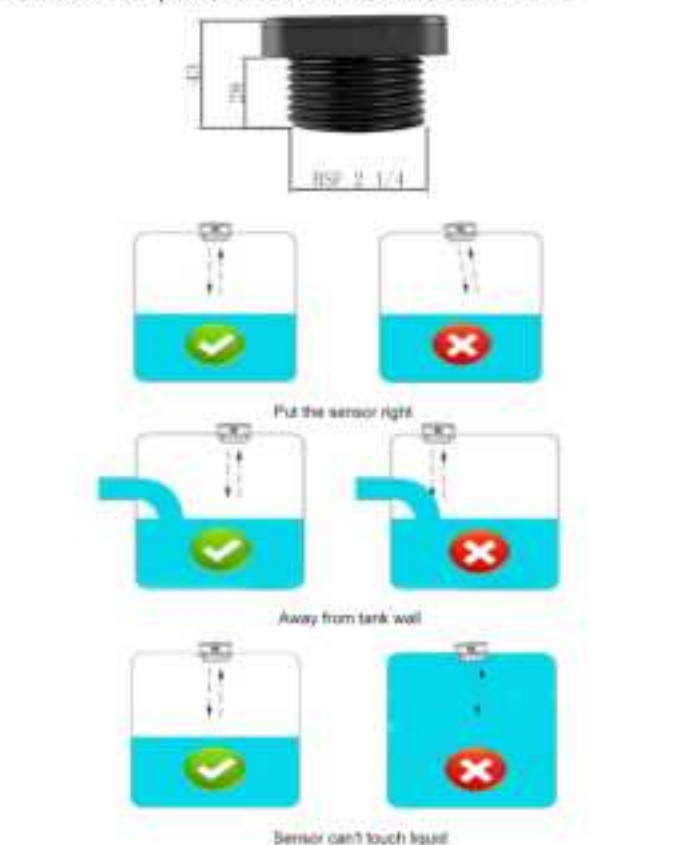
Thank you for purchasing the Wireless Ultrasonic Liquid Sensor with Tuya App Display. The ultrasonic level sensor measures the level without contact with the liquid. The sensor sends an ultrasonic signal, which is reflected back from the liquid surface. The fill level can thus be determined. The sensor can be used for oil and water tanks.



- ◆ Can be used for various liquids, since the ultrasonic sensor does not result in direct liquid contact
- ◆ Detect Range: 10cm to 2.9m can measure high tanks
- ◆ High and Low liquid alarm function
- ◆ Ideal for water/oil tanks
- ◆ Be able to monitor several tanks in one time.

2. MOUNT THE SENSOR ON THE TANK

The sensor should be in the middle of the tank and not on a liquid inlet. This can falsify the measurement result. Please refer to the following pictures for the best installation positions. The hole should be about 56 mm.



3. DETAILED PARAMETERS - SOLAR PANEL

Operating Voltage:	5.0~5.2V
Maximum Operating Current:	1500mA
Power Consumption:	3.3W
Typical Charging Time:	16-18 hours
Power Output/Power Input:	Output: Device Power Supply Input: Internal Battery Charging
Battery Model:	18650 rechargeable lithium-ion cell 2600 mAh pcs, max 6pcs (Optional)
Cable Length:	2M (meter)
Waterproof Rating:	IP67
Working Temperature:	-20°C~+65°C
Power Button Setting:	Push On/Off

CIRCUIT PROTECTION

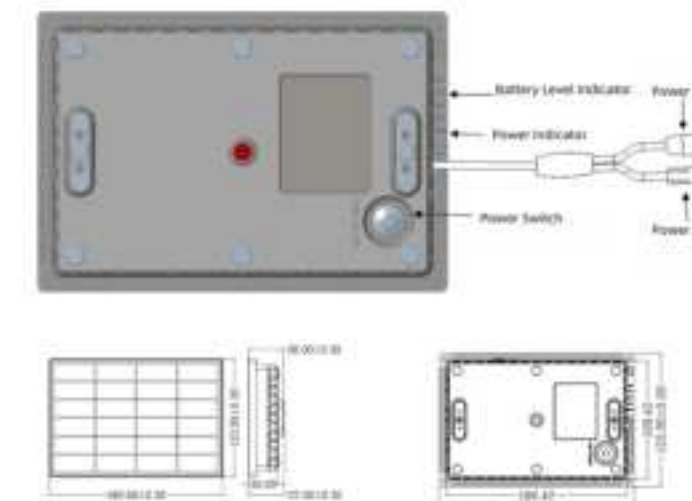
- **Overcurrent Protection:** 1500mA
- **Overheat Protection:** 65°C
- **Charge and Discharge Temperature Protection:** 65°C
- **Short Circuit Protection:** If power indicator and battery level indicator are off or blinking, it is short circuit protection. Press the power switch to restart the device.

4. INDICATOR DESCRIPTION - SOLAR PANEL

	On	Blink	Off
Green LED	Normal		The battery is dead or damaged
Red LED	Battery Level Indicator	Being charging	

Green LED: Power
4 Red LEDs: 25%, 50%, 75%, and 100% of the battery level

SCHEMATIC



5. CONNECTION

- 1) Download "TUYA Smart APP" or "Smart Life APP" directly in the app store of mobile. Or scan the below code to download app. iOS and Android device are ok.



2) Led and button on sensor

Red LED on/off: Power

Green LED on/off: wifi status indicator, will be on when connected
Press the button for 1s to reconnect wifi

Blue LED: flash fast wifi connecting, flash slow connected
3) Turn on the Bluetooth on the mobile phone and open the APP TUYA Smart or Smart Life.



When adding device, make sure that the sensor and the mobile are connected to the same WIFI.
After setting the sensors must work under wifi. If the mobile phone can't find the device or fails to connect the device, please click the PCB button twice to add the device again or put the sensor close to router and try again.

6. SETTING



- 1) Set Installation height ①
It is distance from sensor to tank bottom.
Note: The installation height is different with tank height because the sensor may be installed over the tank height.
The max installation height is 2.9 meters. If more than 2.9 meters, it is not suitable for this sensor.
- 2) Set sensor to liquid full line ②
It is distance from sensor to full line.
Note: The blind zone is 0.1 meter. It can't be smaller than 0.1 meter.
- 3) Set Max for full level alarm
- 4) Set Min for low level alarm

5) Sleep Mode

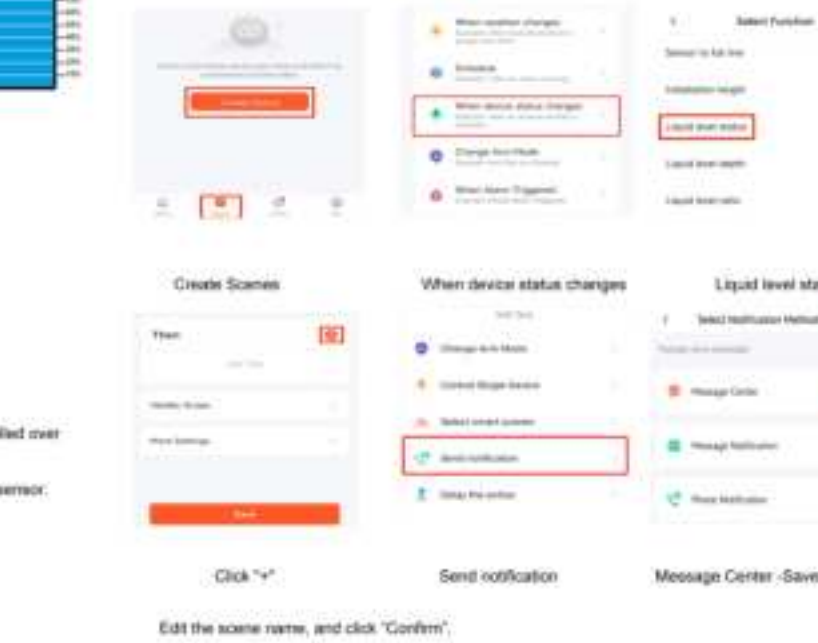
Click Sleep Switch to enter sleep mode which can save battery energy. If not in sleep mode, the batteries can only last for one day. In sleep mode, the sensor detects liquid level for 20s for every 2 minutes.

6) Share to other device.

Click ③ to enter edit and choose Share Device

7) Set Alarm

Go back to the home page, click "Scenes".



Click "+"
Edit the scene name, and click "Confirm".