

## Tuya WiFi Water Level Controller



<b>Product Name</b>	Tuya Water Level Controller with Temperature Sensor
<b>Size</b>	89mm x 55mm x 44mm
<b>Function</b>	add water & pump water & Time limited pumping water
<b>Relay output</b>	two Relay outputs, normal open
<b>Delay relay 1</b>	0 to 30s settable
<b>Limit relay 1 running time</b>	0 to 720 minutes settable
<b>5 water levels</b>	0%, 25%, 50%, 75%, 100%
<b>Contact us</b>	Dear friends, if you have a large quantity, please contact us to quote you the best price. Thank you very much

# 1. Instruction

it is a WiFi smart water level controller, which can be set by APP to realize water level monitoring, Water supplement or drainage, high and low water level remote APP push alarm notification etc. product is suitable for various water level control occasions, HVAC system, hot water process, municipal drainage, boiler, water tower, storage tank, breeding irrigation etc.

## 2. Main Features

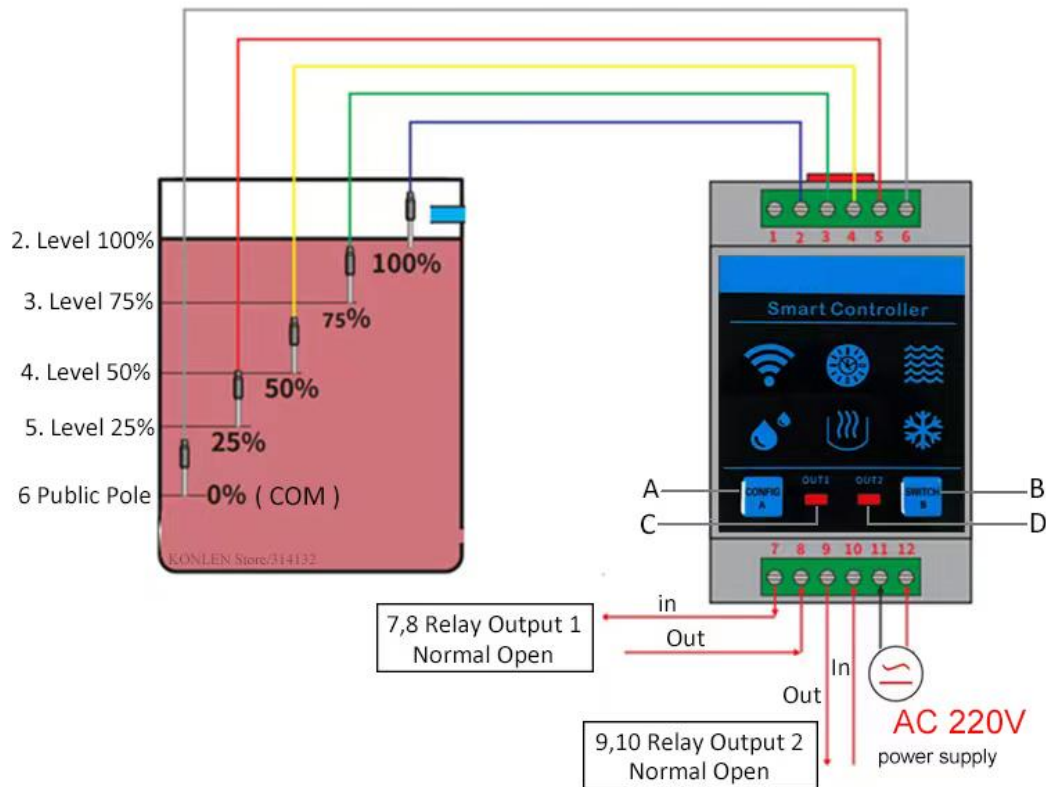
- \*Real-Time supervision: APP display the current water level, working model, starting/stopping water level etc.
- \*Control equipment (relay 1) on/off remote by APP, user can also turn on/off equipment by the manual switch button B when it is without WiFi or WiFi is off line
- \*Two relay outputs: Relay 1 control water level, Relay 2 control heater or external wired siren.
- \*Preset "add water" or "Pump water" working model, can auto turn on/off relay 1 when it reaches to the preset water level value.
- \*Set upper and lower limit value of water level alarm via APP, real-time push alarm notification to users' smart phone
- \*Can set equipment (Relay 1) running time or time delay.
- \*Power off memory: It can remember all the previous setting and status when power supply recovers. Don't worry about data loss caused by Power failure.

## 3. Specification

- \*Product Size: 89\*55\*44mm
- \*Power supply: AC220V
- \*Power consumption: Less than 2W
- \***Note:** The contact current capacity is 10A for resistive load and 2A for inductive load. It can control 2000W resistive load or 500W motor/water pump. Need large loads, please add AC contactor, or it will cause burning danger
- \*Limited running time of relay output 1: 0-720 minutes settable via APP. Each setting progresses is 5 minutes: 0, 5, 10, 15, ..... 710, 715, 720
- \*Time delay setting of relay output 1: 0-30 seconds settable via APP.
- \*Relay lifespan: 100000 times.
- \*Device working environment: -10°C ~ 50°C
- \*WiFi: WiFi 2.4GHZ B/G/N, not support 5G.

## 4. Product Instruction

Before connecting to the 220V power supply, please reconfirm whether your wiring is correct to prevent equipment from burnout



A: WiFi configuration button

B: On/Off switch of Relay Output 1: Users can press the button the button B to switch on/off Relay 1 manually. It is only effective when the current water level is between the preset start and stop water level value.

C: WiFi configuration Indicator/Relay Output 1 Status Indicator

D: Relay Output 2 Status Indicator

Indicator flashing during WiFi configuration, Indicator on when relay closed, Indicator off when relay open.

Terminal 1: No use

Terminal 2: 100% water level

Terminal 3: 75% water level

Terminal 4: 50% water level

Terminal 5: 25% water level

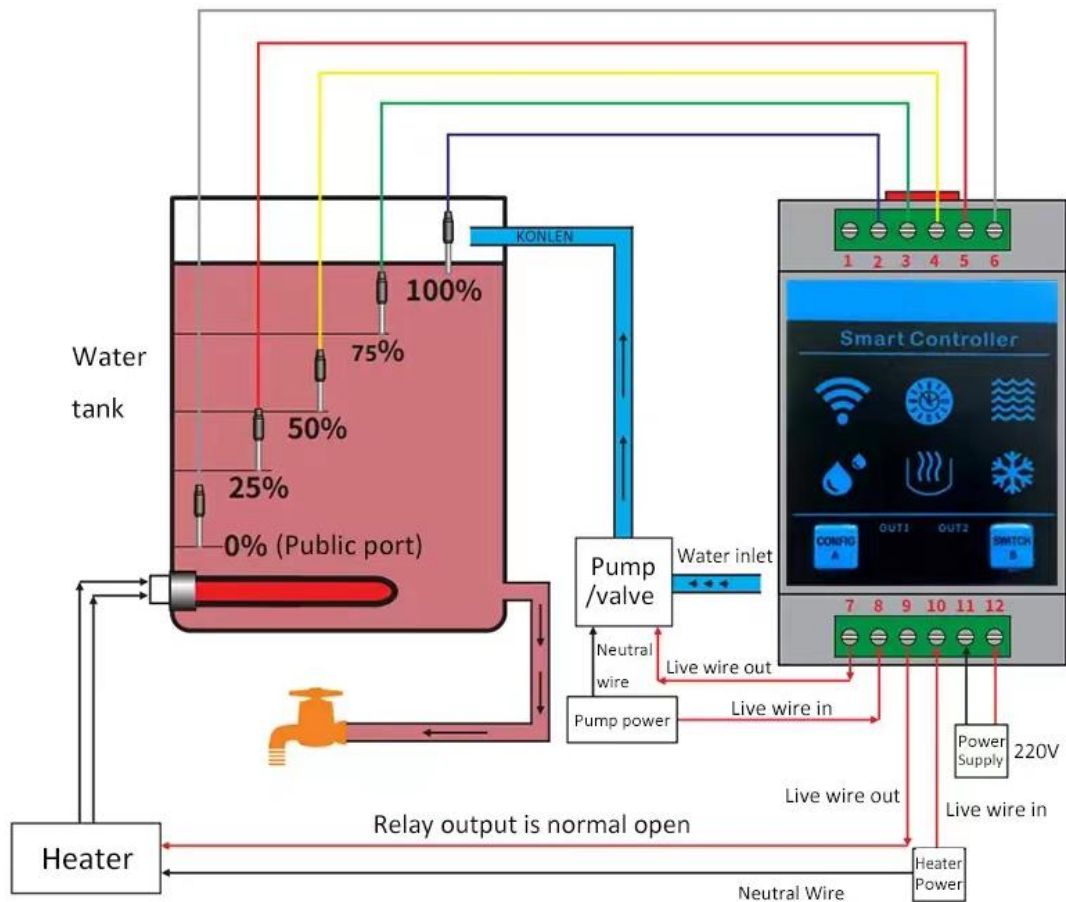
Terminal 6: 0% water level

Terminal 7, 8: relay output 1 (Normal open)

Terminal 9, 10: relay Output 2 (Normal open)

Terminal 11, 12: 220V power supply

## 5. Wiring Diagram(Take “add water” as example)



Water level rising: water level < 25% electrode, App display 0%; Reach to 25%, App display 25%; Reach to 50%, App display 50%; Reach to 100%, App display 100%.

Water level reducing: Water level below 100%, App display 75%; Below 75%, App show 50%; Below 50%, App display 25%; Below 25%, App display 0%.

**Normally Relay output 1 (terminal 7,8) connects with water pumps used for controlling water pump on/off.**

**In add water mode, normally relay output 2 (terminal 9,10) can connect with heater, used for auto controlling heater on/off. In pumping water mode, relay 2 is just a alarm output.**

## 6. Operation

6.1 Download Tuya Smart APP/Smart Life APP than login account

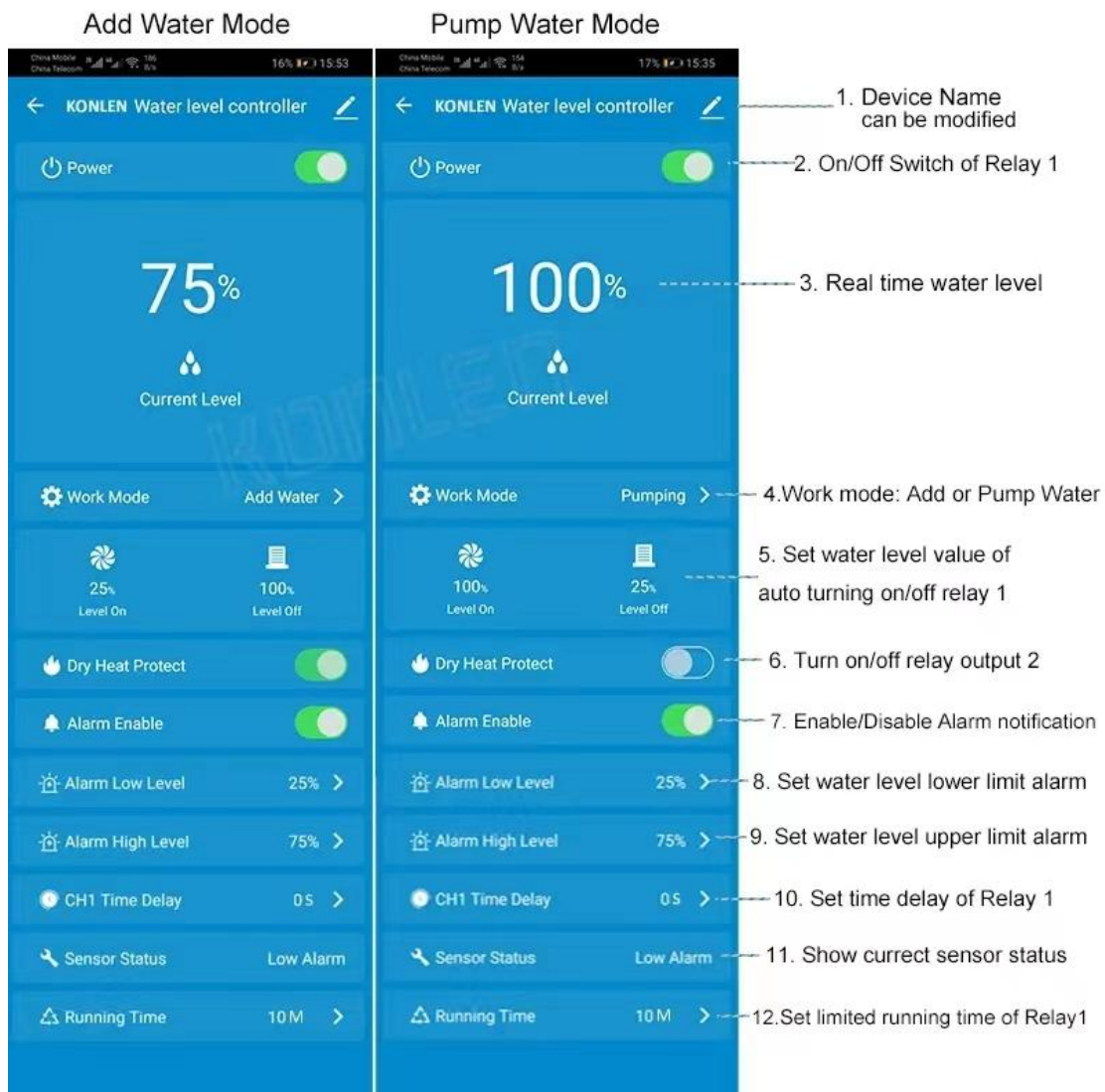
6.2 APP add device

Connect power,wait for a moment.Please start to configure WiFi when you see the OUT 1 indicator flashing quickly.

Note:If you can't see the OUT 1 indicator flashing quickly,the reason is:factory help test the device before shipment,but forget to reset it sometimes,please rest the device like this:Press and hold the WiFi configuration button first(don't lease it),then cconnect with 220V power supply.

Don't release the button until see the Out 1 and Out 2 are flashing at same time,then you can start to configure the WiFi.

6.3 APP Instruction



1. Device Name:Can be modified

2. On/Off Switch Of Relay 1:It is only effective when the current water level is between the preset start and stop water level value

3. Display real time water level:Five water levels:0%,25%,50%,75%,100%

4. Choose working mode: Adding water or Pumping water
5. Set water level value of auto starting/stopping.  
For example: if you want equipment auto-starts to pump water when the water level reaches to 100%, but auto-stop it when the level lower than 25%. You can set pumping mode, level on 100%, level off 25%.
6. Dry heating protection: in adding water mode, auto turn on/off heater. When water level is lower than 25%, auto-turn off relay output 2, when water level is  $\geq 25\%$ , auto-delay 15s to turn off relay 2.
7. Enable/disable alarm notification.
- 8,9. Set upper and Lower limit value of water level alarm.
10. Set time delay of relay output 1: Relay 1 will delay some time to start/stop equipment when it reaches to preset water level.
11. Show current sensor status
12. Set limited running time of relay output 1: It can apply to Mode 3 (Time-limited adding water) and Mode 4 (Time-limited pumping)

#### 6.4 Four control modes:

##### **Control Mode 1: Add water**

Water level  $\geq$  preset "stop level", relay output 1 disconnect, stop to add water; Water level  $<$  start up level, relay output 1 connects, start to add water.

Dry heating protection: water level  $< 25\%$ , relay output 2 disconnect, stop heating; Water level  $\geq 25\%$ , relay output 2 auto-delays 15 seconds connect, start heating.

##### **Control Model 2: Pump Water**

Water level  $<$  preset "stop level", relay output 1 disconnects, stop to pump water; Water level  $\geq$  start up level, relay output 1 connects, start to pump water

In pumping water mode, relay 2 is an alarm output, Water level  $\leq$  preset lower limit alarm value or water level  $\geq$  upper limit alarm value, relay output 2 connects.

##### **Control Model 3: Time-limited adding water**

Water level  $<$  start up level, relay output 1 connects, starts to add water, at same time, starts the timer. Relay 1 will auto disconnect when it reaches to the preset limited running time, stop to pump water

##### **Control Model 4: Time-limited pumping**

Water level  $\geq$  start up level, relay output 1 connects, start to pump water, at same time, starts the timer. Relay 1 will auto disconnect when it reaches to the preset limited time of running, stop to pump water.

#### 6.5 Push alarm notification

For example: reset alarm lower limit of water level is 25%, alarm upper limit is 75%. When water level is lower than 25% or higher than 75%, it will push alarm notification to users' smart phone via APP. If you need the alarm function, please enable the alarm notification.