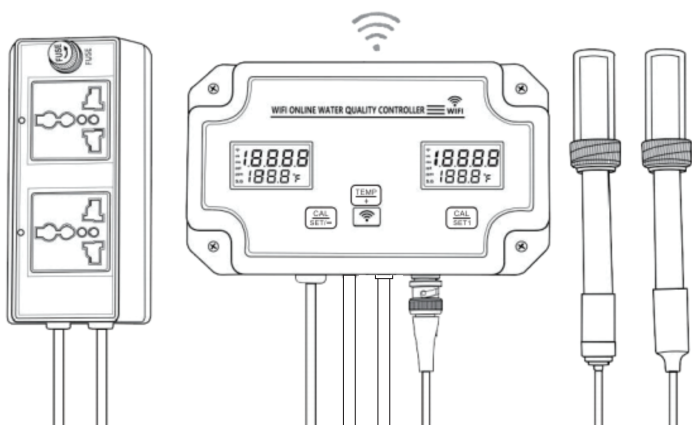
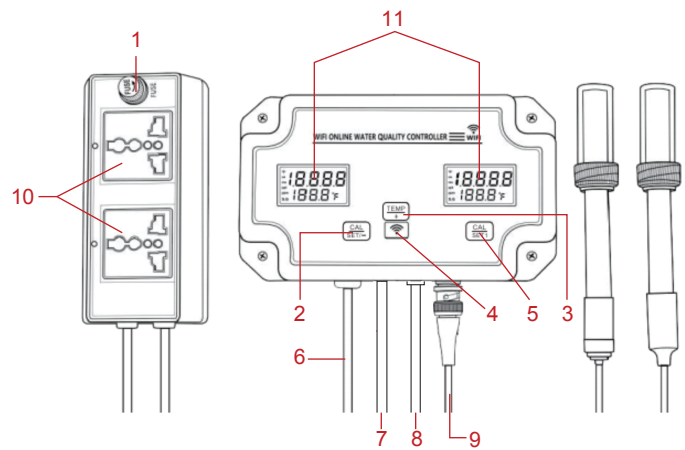


WATER QUALITY CONTROLLER

Quick User Guide



DEVICE INTRODUCTION

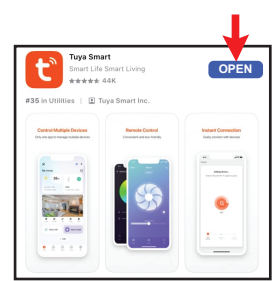


- 1. FUSE
- 2. EC CAL/SET/-
- 3. TEMP/+
- 4. WIFI
- 5. PH CAL/SET1
- 6. AC IN
- 7. EC IN
- 8. TEMP IN
- 9. PH IN
- 10. AC OUTPUT
- 11. LCD

APP APPLICATION

1) App Installation

a. Search for "Tuya Smart" on the App Store for iOS or Google Play Store for Android, and proceed with the download.



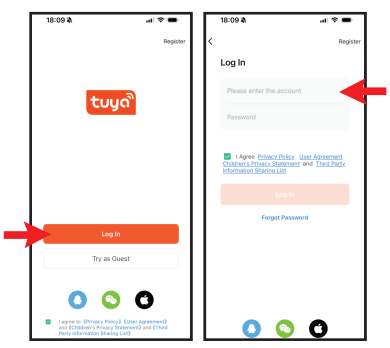
SCAN THE QR CODE
to download the **USER MANUAL** in different languages and **SOFTWARE**

TUTORIAL VIDEO ON HOW TO USE

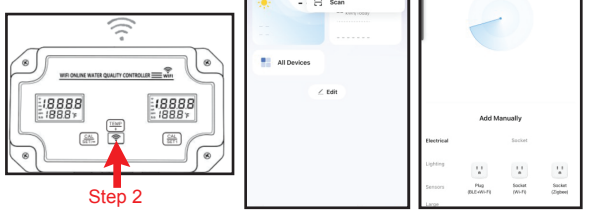
Need more help? **CONTACT US.**

www.cd50.net/493/

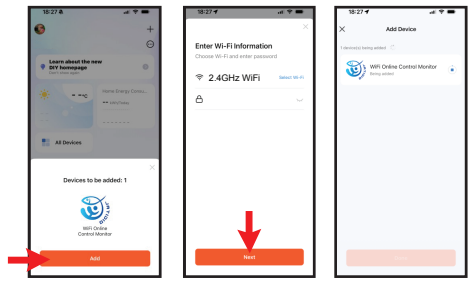
b. Login with your account or register a new account if you don't have one.



c. Go to Tuya Smart homepage, tap "Add Device", and long-press the "Wi-Fi" button to start searching.



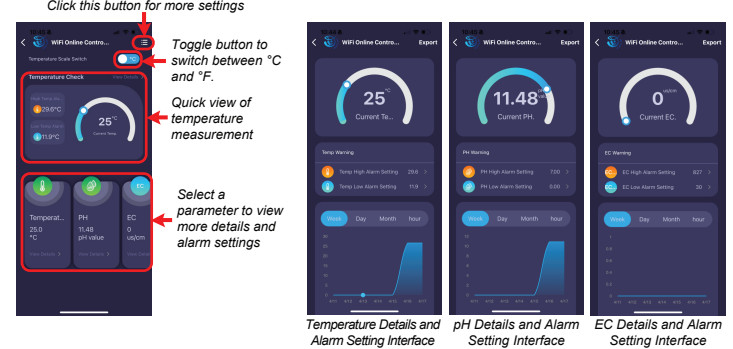
d. The device will appear as below, click "Add" to begin the Wi-Fi connection process.



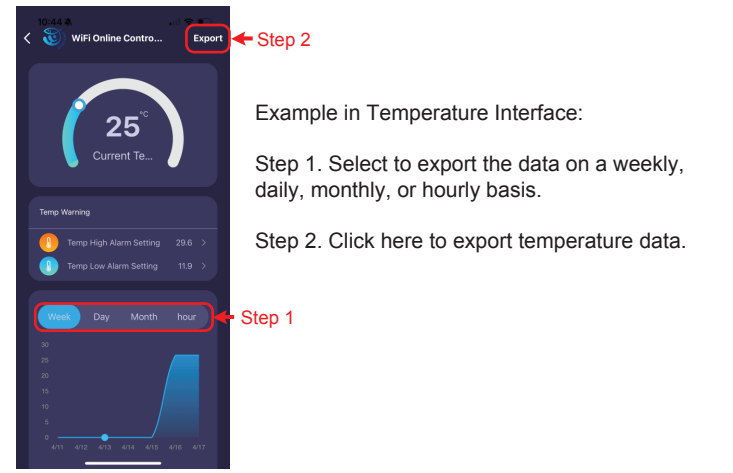
Note to Buyer(s): Wi-Fi must be 2.4GHz to work with the meter and APP

e. Click "Done" once the above process is complete, and the device is now ready for use.

2. App Interfaces



3. Data Export



CONTROL LOGIC OVERVIEW

The output activates when the measured parameter (e.g., pH) exceeds preset high or low alarm thresholds. There are different modes available for various applications.

a. Long press the "CAL SET" key for 1 second, then release it. The "C-1 code icon" will appear at the bottom of the LCD display.



Press the "CAL SET" key to cycle through C-1, C-2, C-3, and C-4. Select the desired mode and wait for 5 seconds for the code to disappear, indicating that the setting is finished.

pH control mode:

	Indicates the output socket will be activated when the measured pH level exceeds the High or Low Alarm Setting values.
	Indicates the output socket will be activated when the measured pH level between the High and Low Alarm Setting values.

Temperature control mode:

	Indicates the output socket will be activated when the measured temperature value exceeds the High or Low Alarm Setting values.
	Indicates the output socket will be activated when the measured temperature value between the High and Low Alarm Setting values.

b. Long press the "CAL SET" key for 1 second, then release it. The "C-1 code icon" will appear at the bottom of the LCD display. Press the "CAL SET" key to cycle through C-1, C-2. Select the desired mode and wait for 5 seconds for the code to disappear, indicating that the setting is finished.



EC control mode:

	Indicates the output socket will be activated when the measured EC level exceeds the High or Low Alarm Setting values.
	Indicates the output socket will be activated when the measured EC level between the High and Low Alarm Setting values.

Below is an operational example for pH parameter:

pH Example Setup

pH High Alarm Setting:	pH Low Alarm Setting:	CO2 bottle/Dosing Pump:
6.0	4.0	Plugged into the pH output socket.

If user selects :

Condition:	Action:	Termination:	Reactivation:
Current pH = 6.99 (exceeds high threshold of 6.0).	Output socket activates, powering the CO2 bottle / dosing pump to add acid, lowering pH.	Output turns off when pH drops below 6.0.	Output re-activates if pH rises above 6.0 again.

If user selects :

Condition:	Action:	Termination:	Reactivation:
Current pH = 5.5 (within the 4.0~6.0 range).	Output socket activates, powering the CO2 bottle / dosing pump to add acid, lowering pH.	Output turns off when pH drops below 4.0.	Output re-activates if pH rises above 4.0.

OPERATIONS

- 1) Remove the protective cap from the electrodes and connect each electrode to its corresponding socket on the device.
- 2) Rinse the electrodes with distilled water and dry with filter paper.
- 3) Plug in the power supply and turn on the device.
- 4) Immerse the pH, temperature, and EC electrodes into the testing liquid. Stir gently to ensure even distribution and wait for the readings to stabilize before taking the readings.
- 5) Press the "TEMP" button to toggle between °C and °F.
- 6) After use, rinse the electrodes and securely replace the protective cap.

CALIBRATIONS

1). 3-Point pH Calibration

a. Dissolve each pack of powder in 250ml of distilled water by gently stirring for 30 seconds until the powder is completely dissolved.

b. For precise calibration, pour one buffer solution into two separate beakers. Use one for cleaning the electrode and the other for calibration. This practice helps minimize pollution levels.

c. Calibration Steps

Users have the option to choose between two calibration sets: 6.86/4.00/9.18 or 7.00/4.00/10.00, with the factory default being 6.86/4.00/9.18. To change the calibration set, long press "CAL SET" for 5 seconds when the probe is immersed in your chosen primary buffer solution (6.86 or 7.00).

When "06.86" appears flashing on the display:

For 6.86 calibration: No action needed (will proceed automatically)

For 7.00 calibration: Immediately press "CAL SET" to switch to 7.00 (same for 10.00)

(A) PH 6.86 CALIBRATION

1. Immerse the pH electrode in pH 6.86 buffer solution and stir gently.
2. Wait until the reading stabilizes.
3. Press and hold "CAL SET" for 5 seconds to enter calibration mode (screen displays "06.86").
4. A reading of 6.86 will flash on the LCD screen. When it stops flashing, the calibration is complete.
5. Rinse the electrode before the next step.

(B) PH 4.00 CALIBRATION

1. Immerse the electrode in pH 4.00 buffer solution and stir gently.
2. Wait for a stable reading.
3. Press and hold "CAL SET" for 5 seconds to enter calibration mode (screen displays "04.00").
4. A reading of 4.00 will flash on the LCD screen. When it stops flashing, the calibration is complete.
5. Rinse the electrode before the next step.

(C) PH 9.18 CALIBRATION

1. Immerse the electrode in pH 9.18 buffer solution and stir gently.
2. Wait for stabilization.
3. Press and hold "CAL SET" for 5 seconds to enter calibration mode (screen displays "09.18").
4. A reading of 9.18 will flash on the LCD screen. When it stops flashing, the calibration is complete.

d. After calibrating all three points, the process is complete.

2). EC Calibration

- a. Submerge the EC electrode in distilled water for 5 minutes to activate it.
- b. Dip the EC probe into an EC calibration solution of 12800 µS/cm (25°C) and stir gently.
- c. Once the reading stabilizes, press and hold the "CAL SET" button for 5 seconds to enter EC calibration (screen displays "12700" or blank). Use the "TEMP" / "CAL SET" buttons to adjust the value until it matches between 12800-12900 µS/cm.
- d. Rinse the electrode with distilled water and dry it with filter paper.
- e. Immerse the probe in an EC calibration solution of 1413µS/cm (25°C) and stir gently until the displayed value matches or comes close to 1413µS/cm.
- f. Calibration is done and rinse the electrode with distilled water and dry it with filter paper.

SPECIFICATIONS

	pH	EC	Temperature
Range	0.00~14.00pH	0~19000uS/cm, 0~199.0mS/cm	0~50°C (32~122°F)
Resolution	0.01pH	1uS/cm (<1000uS/cm) 10uS/cm (>1000uS/cm)	0.1°C (0.2°F)
Accuracy	±0.1pH	±2%F.S	±1.0°C
Alarm setting range	0.00~14.00pH	0~20000uS/cm	
Power supply:	AC230V EU / AC120V US		
Temperature Compensation:	0~50°C		
Operating temperature:	0~50°C		
Dimension:	Main unit: 160 x 106 x 40mm		
Weight:	360g		