

kactoilly Smart Water Monitor

2025 Upgrade Digital Pool Water Tester & Smart Water Monitor User Manual

Brand: kactoilly | Model: Smart Water Monitor

PRODUCT OVERVIEW

The kactoilly 2025 Upgrade Digital Pool Water Tester & Smart Water Monitor is designed to simplify the maintenance of pools, spas, and hot tubs by providing precise, real-time water quality data. This smart monitor automatically measures key parameters to ensure your water remains clear, safe, and perfectly balanced, reducing the need for constant manual testing and optimizing chemical usage.

Key features include:

- **Multi-Functional Testing:** Automatically measures Chlorine, pH, Salinity, ORP, EC, TDS, and Temperature.
- **Smart Monitoring:** Real-time data, live tracking, data logging, and instant alerts via the free Tuya app.
- **Advanced Technology:** Features a patented optical sensor and integrated flow sensor for reliable results.
- **Cost-Effective:** Reduces chemical waste and eliminates the need for expensive consumables.
- **Instant Readings:** Connects via 2.4 GHz WiFi for immediate access to water quality data and historical trends.



Image: The Kactöily Digital Pool Water Tester, its remote display unit, and a smartphone displaying the Tuya app interface with various water parameters.

SETUP GUIDE

- 1. Unboxing and Inspection:** Carefully remove all components from the packaging. Ensure the main probe unit, remote display, and any included accessories are present.
- 2. Battery Installation:** The main probe unit requires 6 AAA batteries (included). Locate the battery compartment on the top of the probe unit, open it, insert the batteries according to the polarity indicators, and securely close the compartment.



Image: A diagram illustrating the physical dimensions of the pool water tester and its remote display, including a detailed view of the battery compartment on the probe unit.

- Power On and Initial Connection:** Power on the probe unit. Connect it to the remote display by pressing the middle button on the display unit. The devices should pair automatically.
- Tuya App Download and Registration:** Download the free Tuya app from your smartphone's app store (iOS or Android). Register for an account if you don't already have one.
- Device Registration with Tuya App:** Open the Tuya app and follow the on-screen instructions to add your Smart Water Monitor. Ensure your smartphone is connected to a 2.4 GHz WiFi network during this process. The app will guide you through connecting the device to your home WiFi.

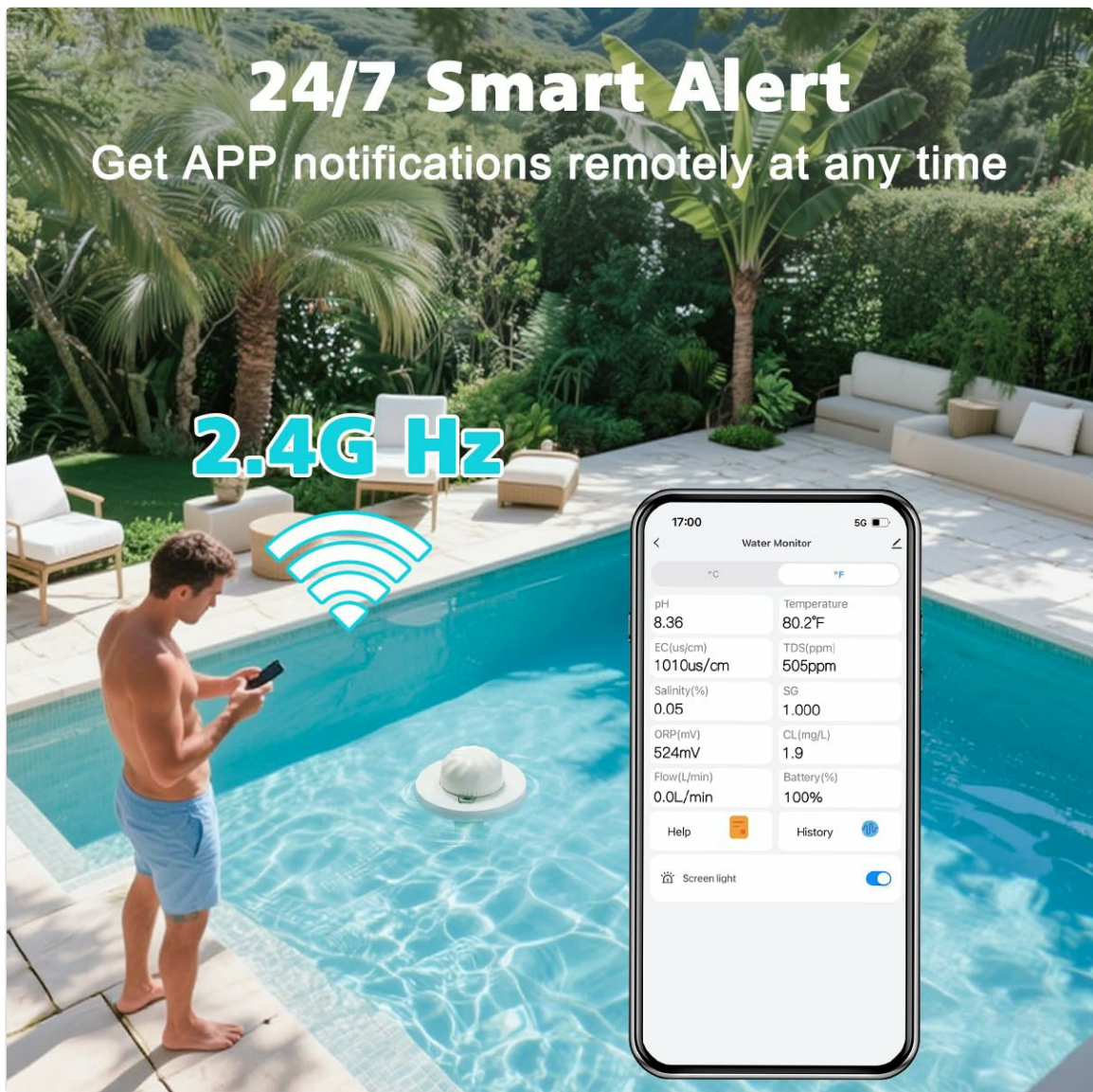


Image: A user interacting with the Tuya app on a smartphone while the water monitor floats in a pool, demonstrating remote monitoring capabilities via 2.4 GHz WiFi.

6. **Initial Calibration:** The pH level is pre-calibrated at the factory. For optimal accuracy, it is recommended to re-calibrate pH every six months. The EC (electrical conductivity) sensor requires re-calibration annually using a specific EC solution (sold separately). Refer to the app for detailed calibration instructions.
7. **Placement in Pool:** Place the probe unit in your pool, spa, or hot tub. It is designed to float. For best results, ensure it is placed in an area with good water circulation and away from skimmers or jets that might interfere with readings.

OPERATING INSTRUCTIONS

Once set up, the Smart Water Monitor continuously measures and transmits water quality data to your remote display and the Tuya app.

- **Real-time Monitoring:** View current readings for Chlorine (CL), pH, Salinity (SALT), Oxidation-Reduction Potential (ORP), Electrical Conductivity (EC), Total Dissolved Solids (TDS), and Temperature (Temp) directly on the remote display or through the Tuya app.
- **App Features:** The Tuya app provides a comprehensive interface for managing your water quality:
 - **Live Tracking:** See immediate updates of all measured parameters.
 - **Data Logging:** Access historical data and trends to understand your pool's chemistry over

time.

- **Instant Alerts:** Receive notifications on your smartphone if any parameter falls outside desired ranges, allowing for timely adjustments.
- **Remote Access:** Monitor your pool's status from anywhere with an internet connection.

Solve Your Pool Problems

- APP Viewing
- High Precision
- Cost-effective
- Lab-Grade Sensors

Poor Accuracy

Can't Connect APP

Expensive Cartridges

Image: An infographic detailing the benefits of the Kactooly monitor, including app viewing, high precision, cost-effectiveness, and the use of lab-grade sensors.

- **Understanding Readings:**

Measurement Parameters and Ranges

Parameter	Range	Description
CL (Chlorine)	0-4mg/L (1mg/L=1ppm)	Measures the level of free chlorine in the water, essential for sanitization.
pH	0-14	Indicates the acidity or alkalinity of the water. Ideal range is typically 7.4-7.6.
ORP (mV)	-999mV- 999mV	Oxidation-Reduction Potential, indicates the water's ability to break down contaminants.
EC (μ S/cm)	0-999 μ S/cm, 1.00- 400mS/cm	Electrical Conductivity, measures the total concentration of dissolved ions in the water.
TDS (ppm)	0-999ppm, 1.00-200ppt	Total Dissolved Solids, indicates the total amount of mobile charged ions, including minerals, salts, or metals dissolved in a given volume of water.
SALT (%)	0.01%-25%	Measures the salinity level, particularly important for saltwater pools.
Temp ($^{\circ}$ F/ $^{\circ}$ C)	32-140 $^{\circ}$ F / 0- 60 $^{\circ}$ C	Measures the water temperature.

Keep Chlorine Pool Balanced

Test the pH, Free Chlorine, ORP Level

CL

ORP

PH

SALT

TDS

Temp

EC

Water Monitor

°C

°F

pH

8.36

Temperature

80.2°F

EC(us/cm)

1010us/cm

TDS(ppm)

505ppm

Salinity(%)

0.05

SG

1.000

ORP(mV)

524mV

CL(mg/L)

1.9

Flow(L/min)

0.0L/min

Battery(%)

100%

Help

History

Screen light

CL	0-4mg/L(1mg/L=1ppm)	TDS	0-999ppm 1.00-200ppt
ORP	-999mV-999mV	EC	0-999uS/cm 1.00-400mS/cm
PH	0-14	SALT	0.01%-25%
Temp	32-140°F 0-60°C		

Image: A visual representation of the multiple water parameters measured by the device, including Chlorine, pH, ORP, Salinity, TDS, EC, and Temperature, along with their typical measurement ranges.

- **Compatibility:** The monitor is suitable for various water bodies including saltwater pools, chlorine pools, bromine pools, ponds, and hot tubs.

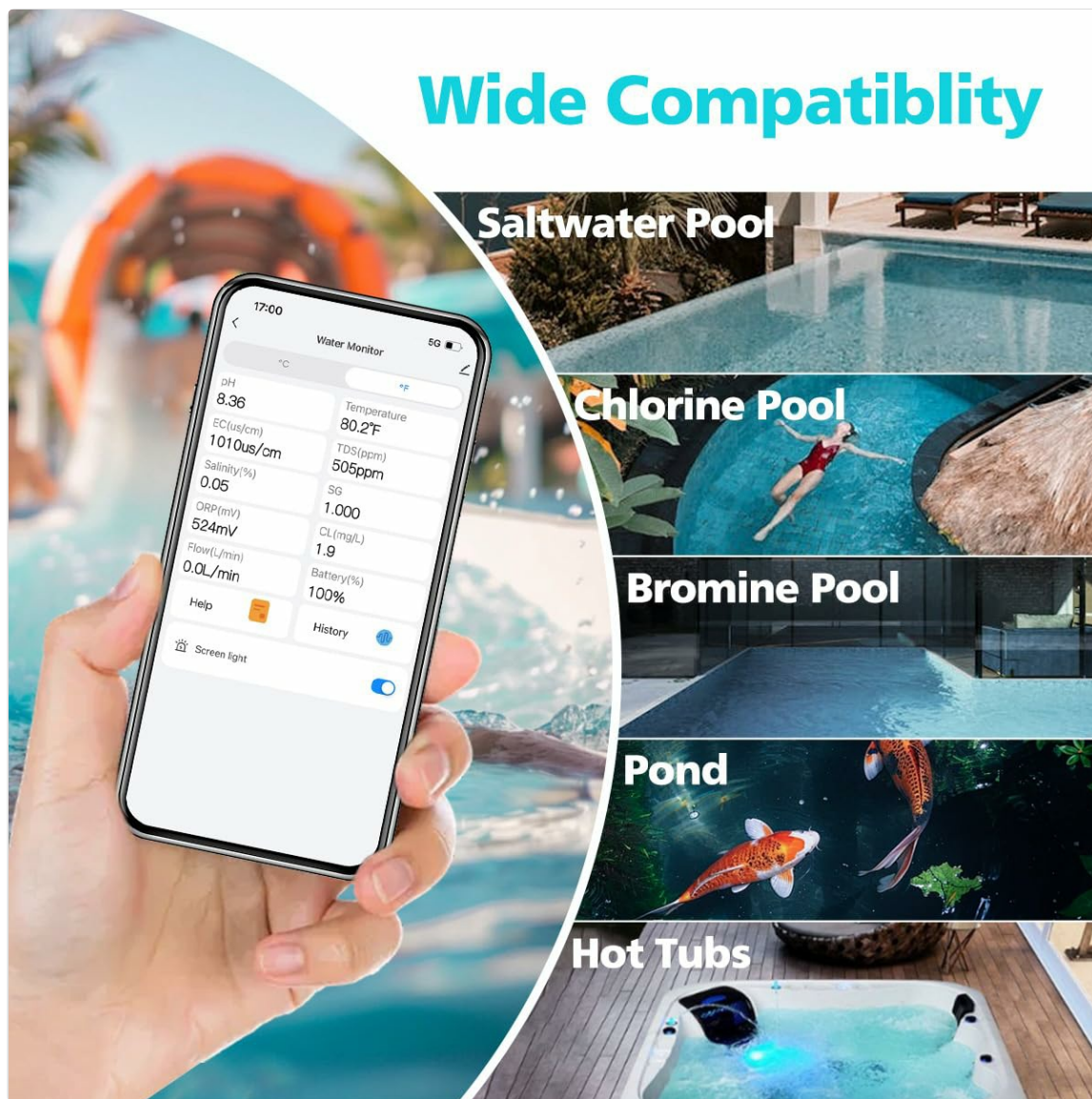


Image: A collage demonstrating the wide compatibility of the water monitor across various aquatic environments such as saltwater pools, chlorine pools, bromine pools, ponds, and hot tubs.

MAINTENANCE

- **Sensor Cleaning:** Regularly inspect the sensors on the probe unit for any buildup of algae, scale, or debris. Gently clean the sensors with a soft brush or cloth and clean water. Avoid abrasive materials that could damage the sensors.
- **pH Calibration:** Re-calibrate the pH sensor every six months to maintain accuracy. Use standard pH buffer solutions (pH 7.0 and pH 4.0 or 10.0) as instructed in the Tuya app.
- **EC Calibration:** Re-calibrate the EC sensor annually. This requires a specific EC calibration solution (e.g., 1413 $\mu\text{S}/\text{cm}$ or 12.88 mS/cm), which is sold separately. Follow the calibration procedure detailed in the Tuya app.
- **Battery Replacement:** When the battery indicator on the remote display or Tuya app shows low battery, replace all 6 AAA batteries in the probe unit. Ensure the battery compartment is sealed tightly after replacement to prevent water ingress.
- **Storage:** When not in use for extended periods, clean the unit thoroughly, remove batteries, and store it in a cool, dry place away from direct sunlight.

TROUBLESHOOTING

Issue: Device frequently disconnects from WiFi or app.

Solution:

- Ensure the device is within range of your 2.4 GHz WiFi router. Walls and other obstructions can weaken the signal.
- Temporarily remove the unit from the water, unscrew the top, turn it off, wait 10 seconds, then turn it back on. Reseal and place it back in the water.
- Check your router settings to ensure it's broadcasting a stable 2.4 GHz signal.
- If the issue persists, try re-pairing the device with the Tuya app.

Issue: Readings appear inaccurate or inconsistent compared to manual tests.

Solution:

- **Recalibrate Sensors:** Perform a pH calibration (every six months) and EC calibration (annually) as described in the Maintenance section and the Tuya app. Ensure you use fresh, correct calibration solutions.
- **Clean Sensors:** Buildup on sensors can affect accuracy. Clean the sensors thoroughly as per maintenance instructions.
- **Water Circulation:** Ensure the device is placed in an area of the pool with good water circulation to get representative readings.
- **Compare with Reliable Source:** If possible, compare readings with a professional pool service or a trusted, recently calibrated test kit.

Issue: Device goes into "sleep" mode or stops transmitting data.

Solution:

- Check battery level in the Tuya app or on the remote display. Replace batteries if low.
- The device may have a power-saving feature. If it stops transmitting, try removing it from the water and placing it back, or power cycling it (turn off, then on) as described in the connectivity troubleshooting.
- Ensure the Tuya app is running in the background on your smartphone and has necessary permissions.

SPECIFICATIONS

Attribute	Detail
Brand	kactoilly
Model Number	Smart Water Monitor
ASIN	B0F66KSVWS
Batteries Required	6 AAA batteries (included)
Package Dimensions	23.9 x 15.19 x 9.7 cm
Item Weight	780 g
pH Range	0-14
Recommended Uses	Hot Tub, Spa, Swimming Pool
Connectivity	2.4 GHz WiFi (Tuya App)
Manufacturer	kactoilly
Date First Available	24 April 2025


WARRANTY AND SUPPORT

Warranty information for your kactoilly Smart Water Monitor is typically provided with your purchase documentation. Please refer to the warranty card or contact the retailer where you purchased the product for specific details regarding warranty coverage and duration.

For technical support, troubleshooting assistance beyond this manual, or inquiries about replacement parts and calibration solutions, please contact kactoilly customer service. Contact information can usually be found on the product packaging, the manufacturer's official website, or within the Tuya app's support section.

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Related Documents

<div>Kactoilly 6-in-1 Aquarium Water Quality Monitor User Manual</div> <div></div>	<div>Kactoilly 6-in-1 Aquarium Water Quality Monitor User Manual</div> <div>User manual for the Kactoilly 6-in-1 Aquarium Water Quality Monitor, detailing its features, specifications, installation, calibration procedures, and after-sales service. Covers monitoring of pH, Temperature, TDS, EC, Salinity, and Specific Gravity.</div>
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[Kactoilly 7-in-1 Aquarium WiFi Monitor User Manual](#)

This manual provides comprehensive instructions for the Kactoilly 7-in-1 Aquarium WiFi Monitor, covering product information, installation, WiFi connection, basic operation, calibration, troubleshooting, and after-sales service. Learn how to set up and use your aquarium monitor for optimal water quality management.