

Water Detective 4

Portable Nine-Parameter Water Quality Tester

Product & Cooperation Profile



Water Detective 4 is a next-generation portable multispectral water-quality testing product for everyday water use, field screening, water-purification services and aquaculture applications. It integrates rapid optical and electrochemical water-quality screening into a portable workflow and presents nine water-quality results in a single measurement, making it suitable for sample screening, side-by-side comparison and trend observation.



9 water-quality indicators



High-precision differential spectroscopy



Automatic water-quality scoring and grading



Water-quality map measurement history



Radar-chart overview



Drop-resistant, anti-slip design



9 Results · One Measurement

Nine results are presented on one device for rapid screening and comparison across samples, time points, and before/after purification.

Beyond TDS: See a More Complete Picture of Water-Quality Change

01 TOC

Total Organic Carbon

A reference reading for total organic carbon in the sample, used to compare changes in organic matter.

02 COD

Chemical Oxygen Demand

Indicates the overall level of oxidizable substances and supports comparison between samples.

03 UV254

UV Absorbance

Indicates changes in some organic matter with UV-absorbing characteristics.

04 Turbidity

Indicates cloudiness and clarity changes associated with suspended particles.

05 TDS

Total Dissolved Solids

An overall reading of dissolved substances, used to compare water sources and purification performance.

06 Conductivity

Indicates the ionic conductivity of water and supports observation of mineralization.

07 Salinity

Indicates the relative level of dissolved salts and is suitable for ongoing recording and comparison.

08 Hardness

A calcium- and magnesium-related reference expressed as CaCO_3 , supporting observation of scaling tendency.

09 Temperature

A reference for sample temperature and measurement conditions, helping interpret readings under different conditions.

* Use recognized laboratory methods for health, safety or regulatory decisions.

From Everyday Water Checks to Professional Services

Designed for individuals, service teams and project users who need rapid multi-parameter reference results and practical comparisons.

01

Home and Everyday Water

Compare tap, purified and bottled water across sources or time points.



02

Water-Purification Services

Compare results before and after treatment or across different treatment options.



03

Outdoor and Field Screening

Run portable rapid checks on everyday water samples and identify when further testing is appropriate.



04

Aquarium and Aquaculture

Record key indicators and temperature changes to support routine water management.



Quality Engineering, Refined Design

From the display and algorithms to sensing and structure, Water Detective 4 is designed for efficient reading, portable use and stable measurement.



IPS high-definition full-color display



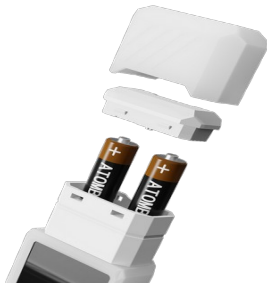
intelligent comprehensive scoring and radar chart



high-precision multispectral water-quality sensor



2-second rapid testing with multiple indicators shown at a glance



AAA battery power for easy replacement



precision probe design to reduce bubble interference.

Product Specifications & Measurement Indicators

Product name		Model	Dimensions	Weight	Power	Wireless	Operating conditions		
Multi-Parameter Spectral Water Quality Tester - Water Detective 4		WQM01H-4	175 × 38 × 21 mm	80 g (without batteries)	DC 3 V (supports two or four size AAA batteries)	Bluetooth Low Energy	Indoor or outdoor normal environments, 10-40 °C, no refrigeration required		
Measurement	TOC	COD	UV254	Turbidity	TDS	Conductivity	Salinity	Hardness	Temperature
Range	0-100 mg/L	0-100 mg/L	0-2 AU/cm	0-20 NTU	0-20,000 ppm	0-60,000 μS/cm	0.1%-4%	0-1,000 ppm	0-80 °C
Display resolution	0.1 mg/L	0.1 mg/L	0.0001 AU/cm	0.1 NTU	1 ppm	1 μS/cm	0.1% 1 ppt	1 ppm	0.1 °C
Repeatability	≤±0.2 mg/L	≤±0.2 mg/L	≤±0.001 AU/cm	≤±0.2 NTU	≤±10 ppm	≤±20 μS/cm	≤±0.2%	≤±10 ppm	≤±0.2 °C
Accuracy	10% F.S.	10% F.S.	10% F.S.	10% F.S.	10% F.S.	10% F.S.	5% F.S.	—	±0.5 °C

About AtomBit

Intelligent Sensing and AI-Integrated Applications

AtomBit focuses on intelligent sensing and AI-integrated applications, building products and solutions around optical sensing, intelligent detection, embedded systems and data analysis.

The company has integrated capabilities spanning sensors and detection modules, intelligent terminals and data platforms, serving water-environment monitoring, industrial process control and intelligent-device applications.



AEROSPACE PROJECT PROOF

Sensing Technology Validated Through an In-Orbit Project

From 2019 to 2025, an AtomBit self-developed high-precision molecular-spectroscopy online detection module provided technical support for the test-scheme design, key-product development and in-orbit flight test of the Advanced Matter-Energy Conversion and Regeneration System Core Technology Functional Verification project.

This statement describes AtomBit's company-level sensing technology experience; Water Detective 4 is a separate portable product.

National metrology certification · More than 30 domestic and international patents · Authoritatively recognized



Explore the Water-Quality Testing Market with AtomBit

We welcome distributors, resellers, project buyers and industry partners from around the world and across regional markets to learn more about Water Detective 4.

● **Distribution and reseller cooperation**

● **Volume purchasing and project cooperation**

● **OEM / ODM and market-specific requirements**

Contact Global Sales

AtomBit Technology Co., Ltd.
Shenzhen · Guangdong · China
sale@atombit.cn · www.atombit.cn

Shenzhen AtomBit Technology Co., Ltd.
Shenzhen · Guangdong · China
sale@atombit.cn · www.atombit.cn

