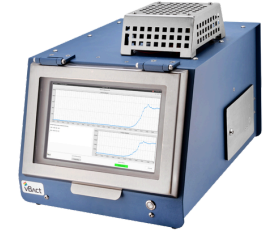


# VBact Water Scanner

Real-Time, Continuous Microbial Water Quality Actionable Insights



## Revolutionizing Water Quality Monitoring

VBact **AI-driven Water Scanner** delivers live, automated detection and count of bacteria, micro-particles, and population shifts in water - continuously, in real time, and without reagents or manual intervention.

It transforms bacterial and particle monitoring into actionable, data-driven control for water quality management, early contamination warning, and process optimization.

### Quad-Verify™-Cross-Validated Intelligence

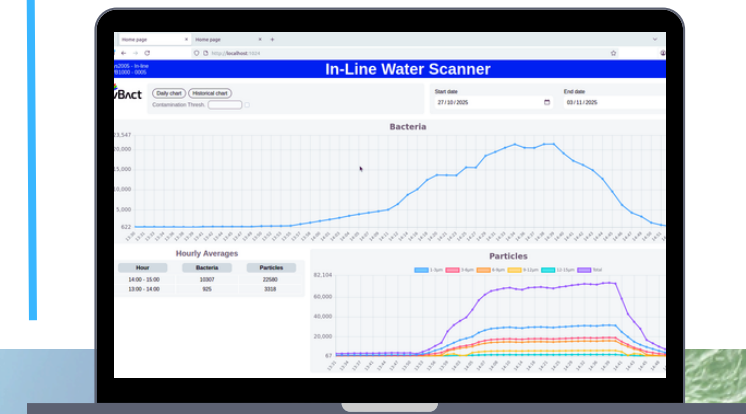
VBact's unique Quad-Verify™ approach combines four continuously measured real-time water quality parameters for cross-validation of detected events, delivering higher confidence and deeper insight.

## Key Advantages

- **Continuous, in-line operation**  
No sampling or manual handling
- **Reagent-free**  
Exceptionally low operational cost (OpEx)
- **Immediate alerts**  
Real-time detection of irregularities
- **Fully automated 24/7 monitoring**  
Minimal maintenance required
- **Quad-Verify™ cross-validation**  
Higher contamination detection confidence
- **Direct Imaging & AI powered Technology**  
Direct single-cell resolution & instant complex data interpretation
- **Remote data access**  
Via secure web-based dashboard

## Core Applications


- Beverage and bottled water production
- Municipal water supply and treatment facilities
- Water based food production
- Ultrapure water systems and pharmaceuticals
- Cleaning in Place systems
- Other liquids



Water Scanner Viewer - Web Based Dashboard


## Advanced Detectors for Complete Water Insight

### 1. Bacterial Detector




Continuously detects and enumerates bacteria in real time at single-cell resolution. Provides total bacterial count and identifies rapid changes in bacterial levels.

### 2. PhenoMonitor™ Classifier



Analyzes bacterial population composition and phenotypic parameters, identifying early population shifts caused by emerging bacteria, chemical contamination, or biological matter. Acts as an early warning system for water quality changes and can identify and track specific bacterial contamination.

### 3&4. Micro-Particles Count & Size Detectors



Quantifies particles and provides size distribution of all detected micro-particles, including bacteria. Detects sudden increases in concentration, indicating filter failure, process disruption, or emerging contamination.

**All Detectors Operate Simultaneously -  
Without Additional Sampling or Cost**



**COMING SOON** 5<sup>th</sup> Detector - Biofilm

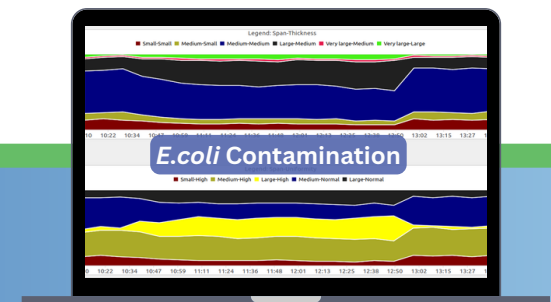
## Actionable Big Data for Smarter Operations

- **Single-cell resolution analysis**  
Thousands of measurements per day
- **Immediate alerts for:**  
Bacterial / biological / chemical contamination
- **Event timeline insight**  
Precise identification of start, magnitude, and end of each contamination event
- **Early detection**  
of contamination or process instability
- **The first microbial Big Data platform**  
Broad, meaningful datasets for new operational insights
- **Trend visualization & historical data**  
- Analytics tools
- **Remote monitoring**  
Seamless integration into plant networks
- **Cross-Validated Event Analysis**  
By singular Quad-Verify™ approach

## Turning Data into Water Quality Insights

vBact solutions empower water-dependent industries to:

- **Detect contamination** the moment it happens
- **Prevent recalls**, production losses, boil alerts and costly shutdowns
- **Optimize treatment**, disinfection, filtration & maintenance operations
- **Ensure safer**, more reliable water across all production processes
- **Increase compliance** and reduces risk of regulatory violations/fines
- **Gain higher assurance** through multi-parameter validation



**vBact Ltd.**

16 Haoren St., Rehovot 7657516, Israel | Tel: +972-52-8484730

[www.vbact.com](http://www.vbact.com) | [info@vbact.com](mailto:info@vbact.com)