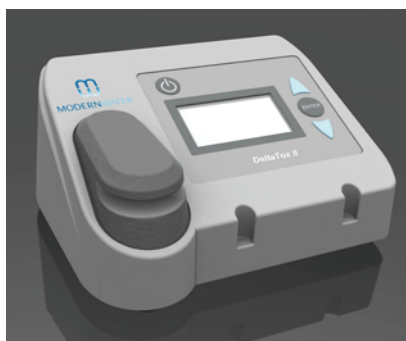


DeltaTox® II: Portable Toxicity and Bio-Contaminant Detection

Modern Water offers a complete portable solution for rapid toxicity and bio-contaminant detection in watersamples. Using the **DeltaTox® II** instrument, you can rapidly assess water quality within minutes for contamination, especially in response to drinking water emergencies and chemical spills to water systems.

Rapid Acute Toxicity Results



The **DeltaTox® II** is a simple and portable test system for acute toxicity that is ideal for screening for chemical contamination. DeltaTox® technology is based on the widely-used and well-documented Microtox® Test System and uses the same specialized strain of luminescent bacteria to provide a direct measurement of the toxicity of a sample and simultaneously detect thousands of potential contaminants. The **DeltaTox® II** Analyzer is portable and is easily used on-site at locations such as: vessels on a lake or the ocean; reservoirs; storage tanks; or sample locations throughout your water distribution system.

Rapid Bio-Contaminant Results

The **DeltaTox® II** instrument can also be used for rapid quantification of total viable biomass using ATP analysis. The DeltaTox® ATP assay uses the principle of bioluminescence to accurately determine the total biomass present in water or wastewater samples. All organisms contain ATP (Adenosine triphosphate) as their main energy source. The amount of ATP in a sample is directly proportional to the biomass of the sample. ATP reacts with luciferin / luciferase – the enzyme system present in firefly tails to produce light. In the reaction, each molecule of ATP produces one photon of light. The light output of this reaction can be accurately measured using the very sensitive **DeltaTox® II** instrument.

- **Results available in 5 minutes, after initial reagent prep**
- **Broad range of toxins detected - >2,700 compounds**
- **Microbial detection level in drinking water – 100 cfu/mL**

DeltaTox® II

SPECIFICATIONS:

Size: 20cm x 18cm x 10cm (8" x 7" x 4")

Weight: 1 kg (2.2 lbs)

Power: Self contained Lithium ion battery or a universal power adapter (15 V dc @ 4 amps)

Instrument Operational Temperature: 0°C - 40°C

Reagent Operational Temperature: 10°C - 35°C

Dynamic Test Range: 1 to 60 million counts (approx.)

Approvals: CE (European Community)

Display Output: Backlight LCD – 8 lines x 20 characters

Data I/O: standard serial USB for data transfer and firmware updates

Data Storage: 6.5k byte storage area (approx. 600 reads)

Data Handling: Stand alone or download capability to PC; built in software prompts operational steps, records light measurements and automatically calculates results for immediate review and further analysis

Test Reagent: Freeze-dried luminescent bacteria (*vibrio fischeri*)

Toxicity Reagent Storage: Freeze-dried -15°C to -25°C

Rehydrated 2 hours (ambient temperature)

ATP Reagent Storage: Refrigerate

Test Modes: Toxicity (Q-Tox and B-Tox) and ATP measurement

Test Durations: 1-60 minute exposure

Test Measurement Criterion: Light output by test reagent measured after timed exposure to a sample

Results Display: Percent light loss or gain for toxicity test; or light unit (photon) count (for ATP measurements)

Repeatability (Precision): <20% coefficient of variation for B-Tox and Q-Tox mode testing

Sensitivity and Range: The analyzer can detect photon counts from 0 to 60 million



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