

FLUIDION

Fluidion ALERT one provides rapid, portable water quality testing of E. coli levels in water samples.

The ‘first handheld microbiology lab for rapid E.coli quantification’, it’s designed to be used by anyone, with minimal training required. Samples are fast, providing accurate bacteria counts in as little as 2 hours, autonomous and extremely portable.

It detects E.Coli specifically, rather than more general indicators of pollution such as endotoxins – but is a more expensive piece of equipment.

HOW DOES IT WORK?

It automatically mixes reagents, incubates the sample and quantifies bacteria using optical detection, giving results in about 2 hours.

Optical detection: As the bacteria grow, they produce specific chemicals that change the way light passes through or reflects off the sample. The device shines light on the sample and measures these changes.

TRIED AND TESTED

River Action uses the Fluidion ALERT One to assess *E. coli* concentrations in the River Thames. Their citizen scientists have identified alarmingly high levels of *E. coli*, with some readings [up to 15 times](#) higher than the Environment Agency's acceptable limits for bathing waters. They have a how-to guide here: [Help using Fluidion's Alert One System - Google Docs](#)

Friends of the Thames are one of the groups using the ALERT One system to monitor water quality along the Thames: [Clean Up Our River | Friends Of The Thames](#)

WHERE TO BUY

ALERT one is a fluidion product. You can find out more here: [Fluidion ALERT One](#)

RELATED ACADEMIC STUDIES

WHO independent evaluation: [jmp-2022-lab-assessment-fluidion.pdf](#)