

# Alert One

## (Handheld E. Coli Analyser) The Standalone Emergency Response Unit for Water Quality

The Alert One is a handheld, autonomous analyser for the rapid quantification of E. Coli bacteria anywhere in the world, without any need for Internet connectivity or wired power. Performing all operations internally, the Alert One can be rapidly deployed in remote areas to assess water quality, such as for emergency response in disaster relief efforts. It is ideal for monitoring water distribution infrastructure, recreational waters, and for citizen science projects. It can even act as a personal water quality monitor!

### The world's first handheld microbiology lab

Alert One is the world's smallest E. Coli analyser: it fits in the palm of your hand and can automatically measure bacteria in a manually-collected sample. It performs incubation, optical monitoring (multispectral absorbance and fluorescence) and signal analysis, providing rapid E. Coli measurements that are displayed on a small integrated screen. Alert One greatly simplifies measurement logistics, eliminates the need for sample refrigeration during transportation prior to standard laboratory measurements, and minimises errors due to sample degradation between collection and measurement. It has been shown to have similar accuracy and repeatability to an approved laboratory using MPN methods, and relies on the reliable Alert technology that has been verified by the WHO and UNICEF1.

### Bring the lab to the sample, not the sample to the lab!

Alert One can be used in a large variety of settings for quantifying E. Coli, Total Coliforms or Faecal Coliform presence in finished drinking water, but also in lakes, reservoirs, rivers, coastal water, catchment sites or in water treatment plants. It has a miniature form factor and can be powered from a USB-C port using either a battery pack or a miniature charger, which makes it easy to transport and deploy anywhere in the world, and to operate in ad-hoc locations, in a car or inside a facility. Alert One greatly simplifies water quality monitoring at remote field locations, or in disaster-impacted areas. With Alert One, water quality monitoring is considerably simplified while minimising cost and time-to-result. It is intuitive and fully operational out-of-the-box. A larger portable version (Alert Lab) and a fully-automated in-situ version (Alert System V2) are also available.

### A fast and reliable response

The Alert One provides a quantified response in terms of E. Coli/100 mL present in the sampled water, that has been validated through numerous side-by-side studies with approved laboratories and international organisations. The system implements the multispectral optical detection technology, which ensures high accuracy consistent measurements and rapid time-to-result.

