

Water Safety First



Online and portable system for detection of *E.coli* and coliforms in water



Designed and Made in Norway



- ✓ Automatically detects viable coliform bacteria
- ✓ Analysis results comparable to ISO standards
- ✓ Analyse 100 mL fresh water sample at remote sites





In daily use all over the world Recognized and verified technology Results comparable to standard methods

Automation of traditional growth methods

The Colifast ALARM draws a representative **100 ml water sample** and can **detect the presence** as low as **1 CFU/100ml** of the target bacteria. This is in **correspondence** with **EU legislations.**





Application Fields

Drinking water

Waterworks

Tap water

Critical nodes

Distribution network

Mobile quality control

Treatment

Basins

Remote lab

Vulnerable recipients



Already Installed Applications





Sabesp in Brasil is one of the largest sanitation companies in the world with 28.2 million customers. The company is responsible for water distribution to 373 municipalities in the state of São Paulo. A water crisis in this Brazilian area in the last decades, drove it to water scarcity and therefore diminishing water pressure and supply.

Sabesp decided it was about time to implement an **additional control** to assure the **safety** of **water disinfection** processes. During the years, Sabesp holds **multiple Colifast ALARMs** for different locations and have **implemented ISO 17025** for a procedure including the Colifast ALARM. A drinking water treatment plant in Spain, using the rivers Ter and Llobregat as raw water source, focuses on delivering water of the best possible quality to the inhabitants of Barcelona. To do this they wanted a more accurate use of disinfectants, reduce the usage overall. All of this has been achieved by implementing continuously monitoring of the river water, using a Colifast ALARM. They use a time to detect method (TTD) on the Colifast ALARM to roughly measure bacterial concentration to know how much disinfectant they need to use to provide safe, and tasty drinking water.





Elevated basins are frequently used for storing water in Norway, especially where periods with water scarcity is common. These basins are often **only tested** for contamination **once per month or week**. No disinfection is normally provided after the storage, which means the **water** is going **straight to the recipients.** If anything was to enter the closed basin right after the monthly test a lot may have happened to the water quality, potentially having harmful or fatal consequences.

This is why **several municipalities** in Norway **use** the **Colifast ALARM** as a **continuous measure** of the **water** going **out of the basin** to better **control the water being delivered** to different cities.







Verified and Trusted by Customers



Colifast ALARM at IVAR IKS, monitoring water that is distributed to one of largest food industry areas in Norway.

«We installed automatic monitorization because we experienced random incidents of coliform bacteria in the distribution line over some years. We wanted to do more systematic measurements on a 24 hours basis, get an earlier warning and through that find the cause of the contamination incidents». **IVAR IKS, Norway**

Colifast ALARM™ has received the U.S EPA ETV statement as an at-line monitor for fecal contamination.



The U.S. EPA Environmental Technology Verification (ETV) program's Advanced Monitoring Systems Center, operated by Battelle, has evaluated the performance of the Colifast ALARM.

Verification results show that the Colifast ALARM detects both total coliforms and *E. coli* in water samples. The verification staff found the ALARM easy to use and stated that the time to result, reagent use and staff time is reduced compared to the reference methods. Additional information is available in the verification reports and statements on the EPA/ETV website.

The EPA Environmental Technology Verification Program (ETV) Name and/or Logo does not imply approval or certification of this product, nor does it make any explicit or implied warrantees or guarantees as to product performance. Information on the performance characteristics of the Colifast ALARM can be found at www.epa.gov/etv, or call Colifast AS at +47 67 10 05 10 to obtain a copy of the ETV verification report.





Several Advantages

Quick results

No human errors

No sample degradation

Same procedure every time

By **automating** the whole sampling, analyzing and reporting **procedure** you not only **remove** the possibility for **human errors**, the system also ensure that the **procedures** are done in **the same way** every time. By leaving the measurement to a computer **subjectivity** is **eliminated**. By **removing** the **transportation** step, the risk of **sample degradation** is **eliminated**. Additionally the **results** are obtained much **earlier** than with the laboratory methods. The system **alarms immediately** if a sample shows presence of target bacteria.





Additional Features

- Remote access to computer via screen sharing.
- ✓ External sample drawn at the same time as the analyzed sample, to validate results in the lab.
- Can run both presence/absence or a time to detect (TTD) method.
- ✓ Sampling from **two sources**.
- Addition of 10% Sodium Thiosulfate for "neutralization" of residue chlorine.



Every third week the operator should:

- Change the pre-filled media bottle
- ✓ Empty waste container
- ✓ Fill cleaning solutions
- ✓ Press start

With an analyzing frequency once per 24 hours, the Colifast ALARM will run unattended for three weeks.

The instrument may draw a sample **every 15 hours** to maximize analyzing frequency.







Specifications







Colifast ALARM General Specifications

Measuring principle	Growth method, Fluorescence of target bacteria
Parameters	<i>E.coli</i> , Fecal/thermotolerant coliforms, total coliforms or <i>Pseudomonas aeruginosa</i> and Tubidity
Detection limit	Target bacteria: ≥1 CFU / 100ml, Turbidity: 4 FNU
Sample volume	100 ml
Alerts	SMS, LAN, PLC, Sound, light
Certifications	CE; RoHS; IP-33, US EPA ETV
Signal output	GSM, LAN or PLC
Display	8" industrial panel PC, IP66, Touch screen
Connectivity	Remote access with external computer, Telephone, PLC
GPS	If GMS is connected to internet
Operating Temperature and humidity	0-35 °C, <95% relative humidity
Sample type	Freshwater, Brackish water
Power supply	110-249V outlet
Warranty	1 year
Storage media	Dark, room temperature (above freezing)
Logging Modes	Single or continuous
Dimensions and weight	645 x 420 x 360 mm (H x W x D), 35kg
Data Memory	32 GB
Placement	On a table top or on the wall
Running time without human interaction	Normally 21 days (depends on sample frequency)



Colifast AS has full control of the production line. All systems and reagents are produced by Colifast AS, at Lysaker, Norway.

For prices and orders please contact your local distributor or Colifast AS.

