

Marine Microbial Testing Solutions

Attain environmental control & operational cost reduction

The marine industry strives to improve its operations and risk management in all areas — particularly environmental control and operational cost reduction. To help simplify the process, LuminUltra Technologies Ltd. has created a cost effective, far-reaching program to monitor all risk areas under threat of microbial contamination — including the associated risks of human contamination, corrosion, system failure, effluent discharge violations, and ecological threat.

Conventional microbiological tools used to evaluate the health of your vessel, crew, and passengers are slow and offer limited information. As a result, issues associated with contamination often go unnoticed until they become serious problems with costly repercussions.

Effectively manage risk in real-time

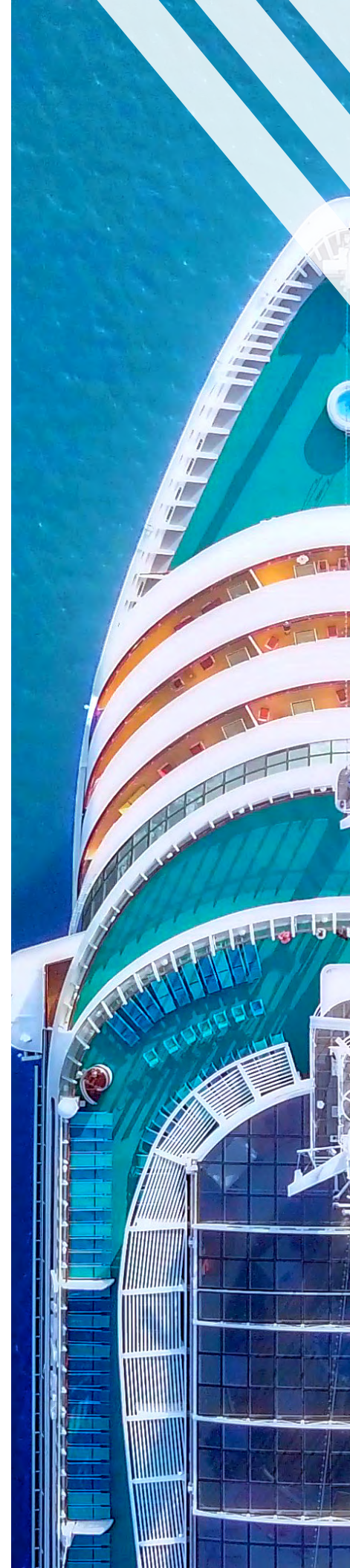
Our microbial monitoring solutions are designed to provide real-time feedback on microbiological content, enabling on-site decision making to keep you ahead of any issues. Now you can address the problem and implement corrections on-the-spot before they get out of hand and gain insights into long-term cost reduction opportunities.

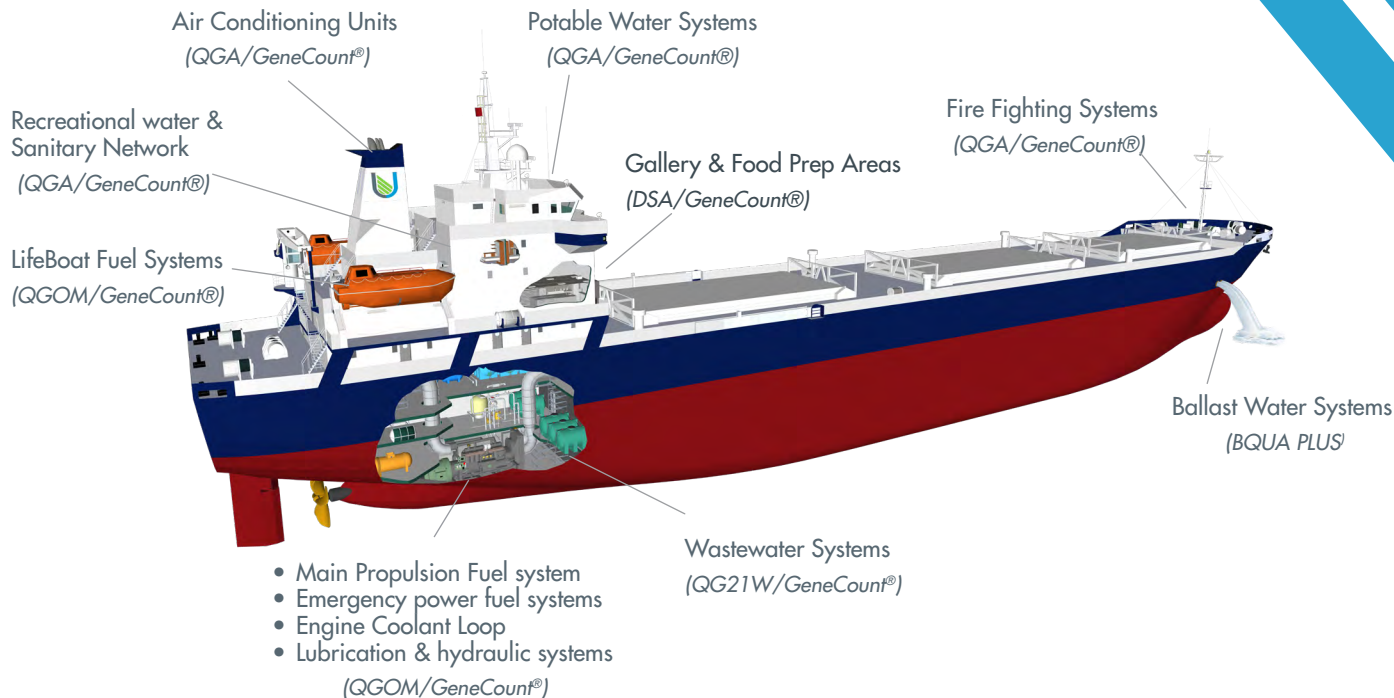
- **Test on-site:** You can reduce cost and time by testing on-site — with results in under 2 hours
- **Easy-to-use:** These tests can be operated by any trained crew members
- **Multi-purpose:** Test applications across your vessel using the same technology

Monitor all microbial contamination risks

Microbial contamination onboard a ship can occur in multiple applications. Our solutions act as your front-line of defence, giving you the tools you need to detect and act quickly.

Application	Fluid	Risk
<ul style="list-style-type: none">• Ballast water	<ul style="list-style-type: none">• Water	<ul style="list-style-type: none">• Non-compliance with IMO ballast water regulations Fines
<ul style="list-style-type: none">• Main propulsion fuel systems• Fuel storage tanks• Emergency power systems• Main engine cooling systems	<ul style="list-style-type: none">• Fuel• Fuel• Fuel• Water	<ul style="list-style-type: none">• Microbiologically influenced corrosion• Fuel system blockage• System failure• Increased maintenance
<ul style="list-style-type: none">• Lubricants and hydraulic fluids• Main engine cooling systems	<ul style="list-style-type: none">• Lubricant• Water	<ul style="list-style-type: none">• Microbiologically influenced corrosion• Systems failure
<ul style="list-style-type: none">• Portable water• Airconditioning systems• Galley and food preparation areas	<ul style="list-style-type: none">• Water• Water• Surface	<ul style="list-style-type: none">• Pathogenic infection of crew/passengers (E.coli, Salmonella, Legionella, etc.)
<ul style="list-style-type: none">• Wastewater	<ul style="list-style-type: none">• Water	<ul style="list-style-type: none">• Litigation from breaking IMO laws and crew safety





Solution Components

2nd Generation ATP®

ATP (Adenosine Triphosphate) is the primary energy carrier for all forms of life. The measurement of ATP concentration in a sample provides a direct assessment of biological concentration and health. Our 2nd Generation ATP® Testing provides data to help you know what is happening in your system. Quickly quantify the living organisms in your system, including tests for:

- Ballast water
- Drinking water
- Sanitary network
- Wastewater
- Air conditioning
- Engine coolant water recirculation
- Fire prevention system
- Heavy fuel oil
- Low sulfur-fuel
- Biofuel
- Lubricant
- Galley & food preparation area pathogens



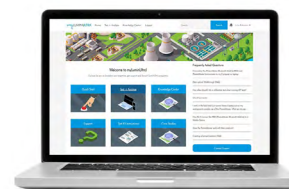
GeneCount® qPCR

Support targeted treatment with in-field molecular biology-based qPCR solutions to identify specific microbes impacting your system, allowing for prevention, troubleshooting, and fast resolution of issues like microbial induced corrosion, Legionella, and SARS-CoV-2, the virus that causes COVID-19.



myLuminUltra™

Access our data management and decision support platform to rapidly manage data, gain insight with analysis and reporting, and oversee testing programs.



520 King Street
Fredericton, NB
Canada. E3B 6G3

T +1-506-459-8777
luminultra.com
sales@luminultra.com

LUMINULTRA®
microbial monitoring