LIQTECH



AQUATICS

RE-THINKING POOL FILTRATION

Maximum performance – minimal resource consumption

QlariFlow Aqatics Filtration

Maximum performance - minimal resource consumption.

Engineered for clarity. Built for performance.
QlariFlow re-think aquatics filtration with high-performance ceramic membrane technology, low resource consumption, modular installation, and automated operation.

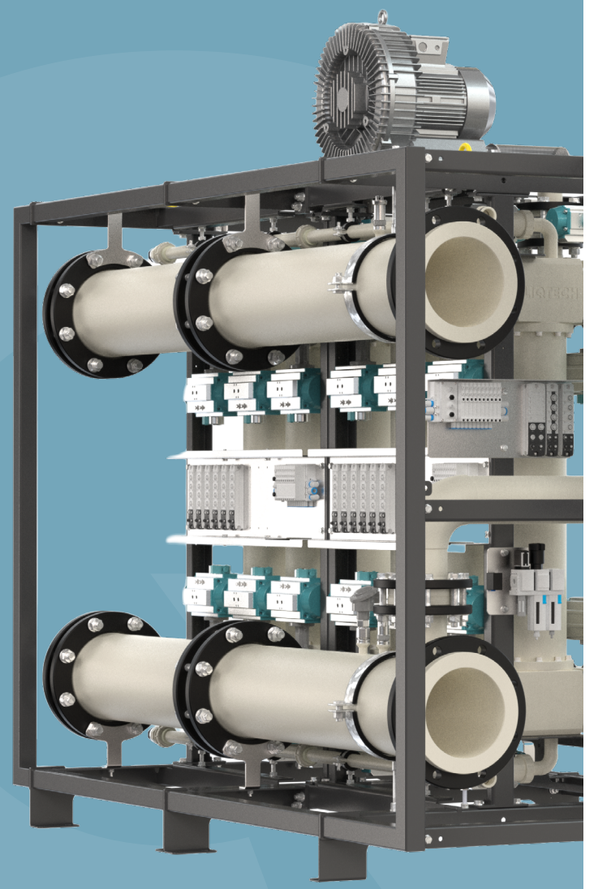
Cleaner water, lower operating cost, and a simpler path from installation to reliable daily operation.

Benefit

- Superior water clarity
- Reliable performance
- Smart and efficient operation
- Sustainable by design

Value

- Ultra-filtration for exceptional quality
- Engineered for continuous commercial operation
- Advanced controls for optimal efficiency
- Lower chemical use and water savings



SiC Membranes - Core Technology

Ceramic silicon carbide membranes provide high throughput at very low pressure.

At the heart of QlariFlow is a hydrophilic silicon carbide membrane designed for demanding pool environments. The material supports high flux, low pressure drop, and reliable operation across a wide chemical range.

High-performance filtration without the fragility or energy penalty of conventional systems.

Benefit

- High flux - more water per square metre of membrane area
- Low pressure drop - TMP around 0.08-0.1 bar
- Chemically inert across pH 0-14
- Extremely durable silicon carbide construction

Value

- Stable and consistent operation
- Long membrane lifetime
- Reduced energy consumption
- Minimal fouling and easy cleaning



Capture & Release

Contaminants are removed rapidly through frequent, efficient backwashing cycles.

Instead of allowing contaminants to remain in the water loop, the system captures them quickly and releases them through controlled backwash cycles. This supports cleaner water, reduced chemical load, and more stable day-to-day operation.

Frequent backwash becomes an efficiency advantage - not a water-waste problem.

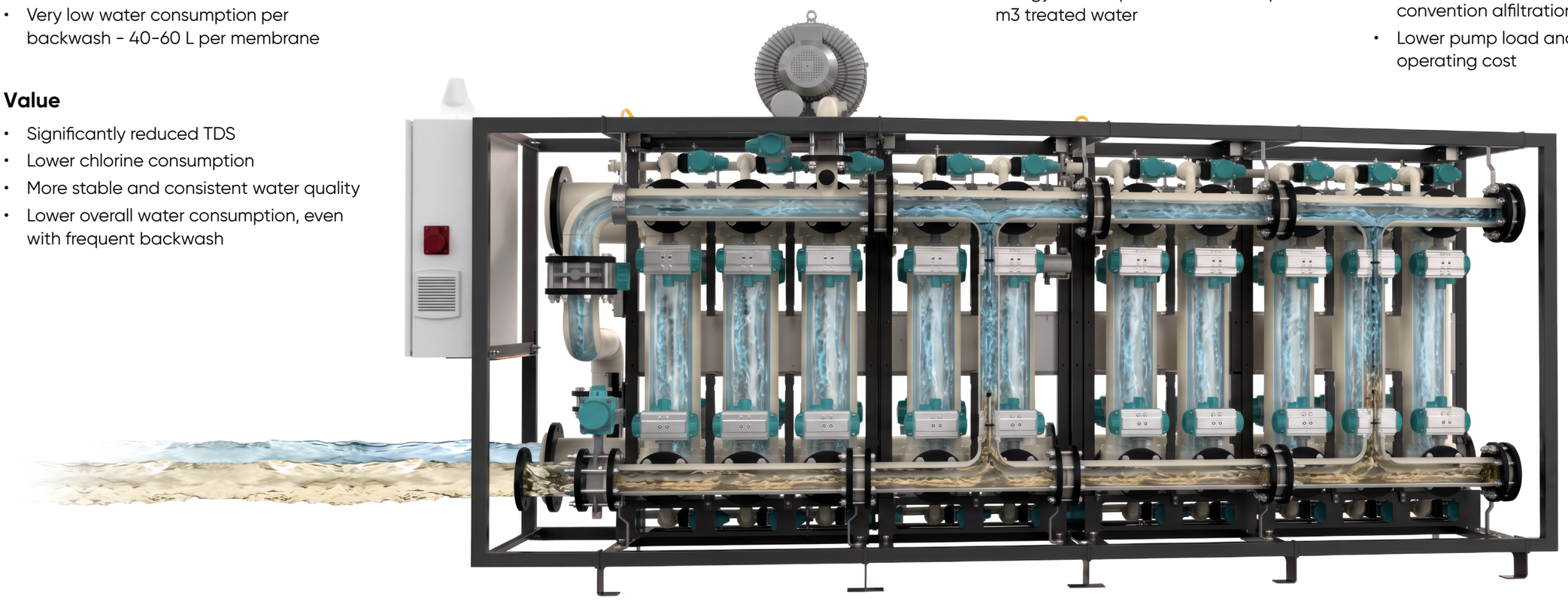


Benefit

- Minimizes the time contaminants remain in the water
- Reduces dissolution of organic matter
- Very low water consumption per backwash - 40-60 L per membrane

Value

- Significantly reduced TDS
- Lower chlorine consumption
- More stable and consistent water quality
- Lower overall water consumption, even with frequent backwash



Ultra-Low Energy Consumption

Low TMP and hydrophilic membrane behavior reduce the work required to move water.

QlariFlow is designed to operate at extremely low pressure. The result is a filtration concept that can support low-energy building standards while reducing operating cost over the lifetime of the installation

Less pressure means less energy - without compromising filtration performance.



Benefit

- Starting TMP around 0.08-0.1 bar
- Very low system resistance
- Energy consumption below 40 W per m3 treated water

Value

- Supports Passive House and low-energy building standards
- Significantly lower energy use than convention alfiltration
- Lower pump load and reduced operating cost

Low OPEX

Resource consumption is reduced across water, energy, chemicals, and manual operation.

Operational savings are built into the filtration concept. Lower backwash water, lower energy demand, and reduced chemical consumption combine to create a more predictable and attractive total cost of ownership.

The strongest business case is the combination of performance, savings, and operational simplicity.

Benefit	Value
Water savings Reduced backwash water usage	**Low total cost of ownership**
Energy savings Lower energy demand	**Fast payback period**
Chemical savings Reduced chemical consumption	**Reduced dependency on operators**
Reduced manual work Minimal manual operation	**More predictable operation for facility teams**

Modular Design

Built as modules that can be transported, handled, and assembled on-site.

The modular format is designed for real plant rooms, not idealized drawings. Each module is sized to fit through a standard doorway, which makes the system well suited to retrofit projects and constrained technical spaces.

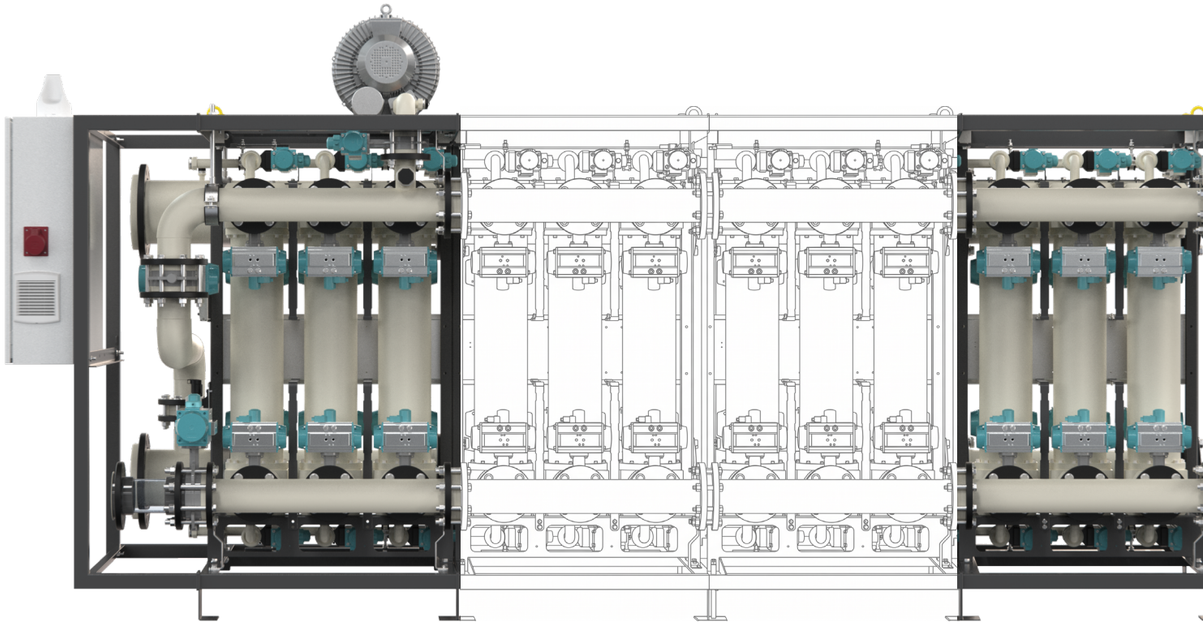
Designed to fit the building - not force the building to fit the system.

Benefit

- Each module fits through a standard doorway - around 83 cm width
- No need for major structural modifications
- Minimal disruption to existing facilities

Value

- Ideal for retrofit projects
- No demolition or major construction work required
- Reduced installation costs and simpler planning



Scalable Capacity

Capacity can grow by adding modules instead of redesigning the entire system.

The system can be expanded in a controlled, plug-and-play manner. This allows customers to start with the required capacity today and add more membrane modules as demand increases.

Start right-sized. Expand when the facility needs it.

Benefit

- Plug-and-play expansion
- No redesign required
- Capacity can be increased over time

Value

- Future-proof investment
- Capacity can grow with demand
- Avoids overdimensioning from day one

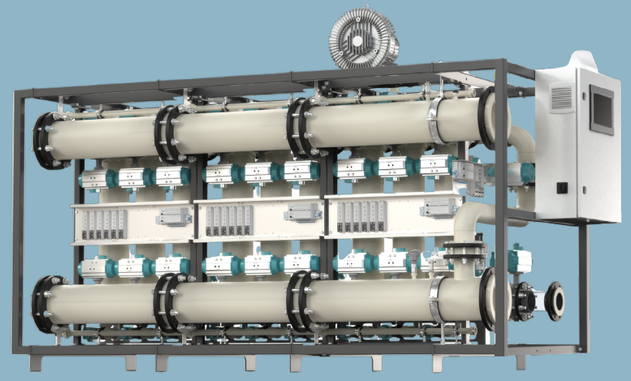
Start

Right-sized today



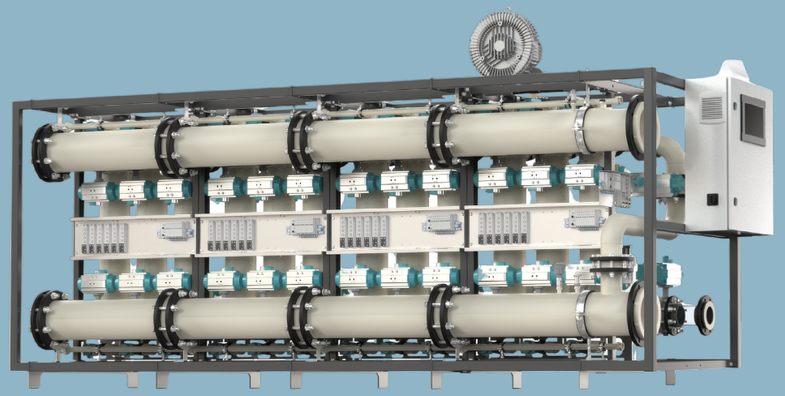
Grow

Add modeules as demand increases



Scale

Expands capacity over time



Fast Installation & Commissioning

A pre-installed system helps contractors reduce risk and meet tight schedules.

01. Delivered

02. Connect

03. Commision

04. Operate

QlariFlow is delivered with integrated software and controls to minimize site work. The approach supports same-day installation and commissioning, helping contractors move from delivery to operation faster.

Shorter installation time means fewer delays, fewer interfaces, and faster handover.

Benefit

- Minimal on-site installation effort
- No complex setup required
- Plug-and-play integration

Value

- Installation and commissioning within the same day
- Reduced project risk
- Helps contractors meet tight deadlines

Automation & Digitalization

Fully automated operation with remote access via HMI and app.

Automation reduces the need for manual intervention while giving operators and LiqTech better visibility into performance. Connectivity enables faster support, optimization, and data-driven service.

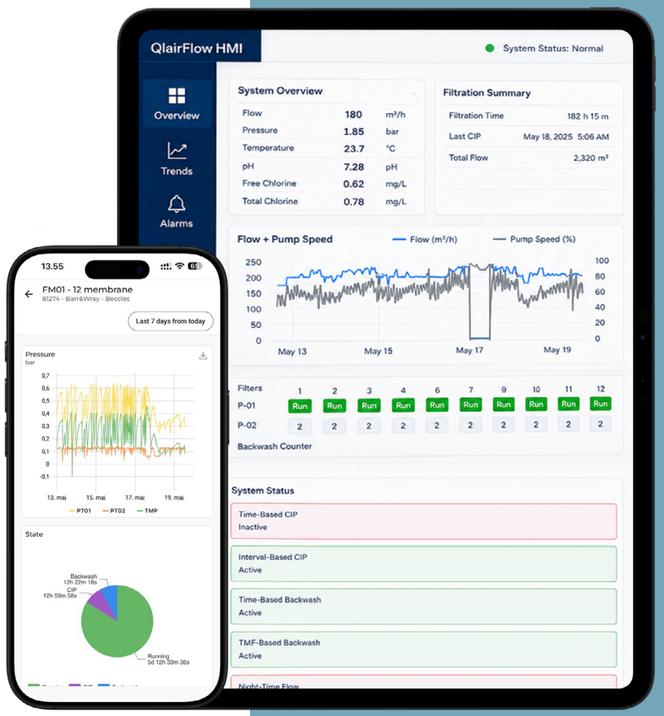
Always connected filtration gives operators control - and gives service teams the data to act early.

Benefit

- WiFi or built-in 4G/5G connectivity
- Real-time data for flow, pressure, and temperature
- Integration of external signals such as free chlorine, total chlorine, and pH

Value

- Minimal need for manual operation
- Fast troubleshooting and support
- LiqTech can monitor and optimize the system remotely



Value Statement

A concise closing page for contractors, operators, and decision-makers.

Automation reduces the need for manual intervention while giving operators and LiqTech better visibility into performance. Connectivity enables faster support, optimization, and data-driven service.

QlariFlow combines a high-performance ceramic membrane platform with a modular, automated system concept. The strongest message is not a single feature - it is the reduction of project risk, downtime, and operating cost at the same time.

Reduces installation risk

Modular units, integrated controls, and plug-and-play commissioning simplify the path from delivery to operation.

Minimizes downtime

Fast installation and remote support help the pool return to stable operation quickly.

Ensures stable operation from day one

Low TMP, frequent backwash, and automation support predictable water quality and lower operator dependency.



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