ULTRABLUE SERIES

UV DISINFECTION • EFFICIENT AND CHEMICAL-FREE WATER TREATMENT

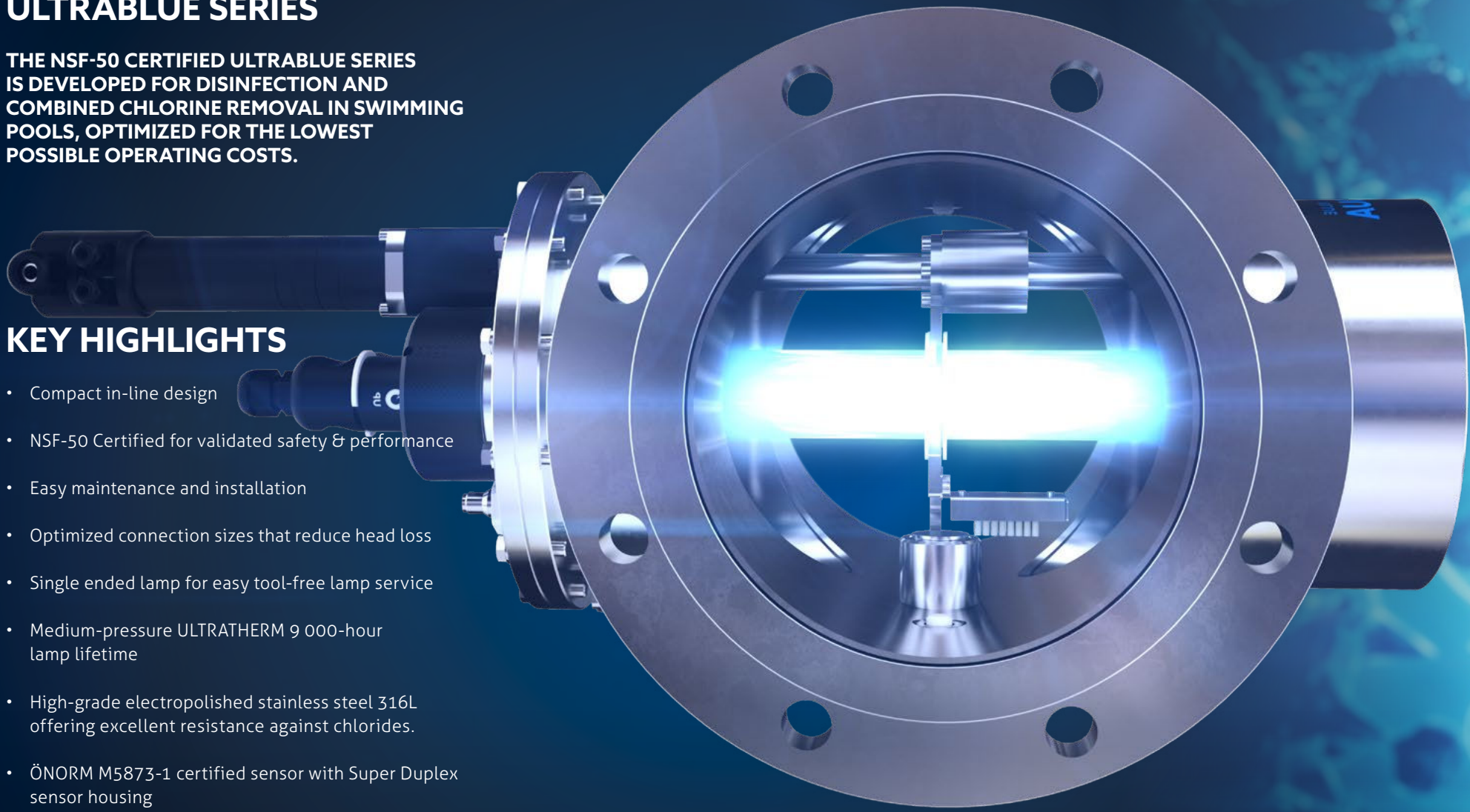
ULTRAQUA

UV DISINFECTION SYSTEMS

WE PROTECT YOUR MOST VALUABLE RESOURCE

ULTRABLUE SERIES

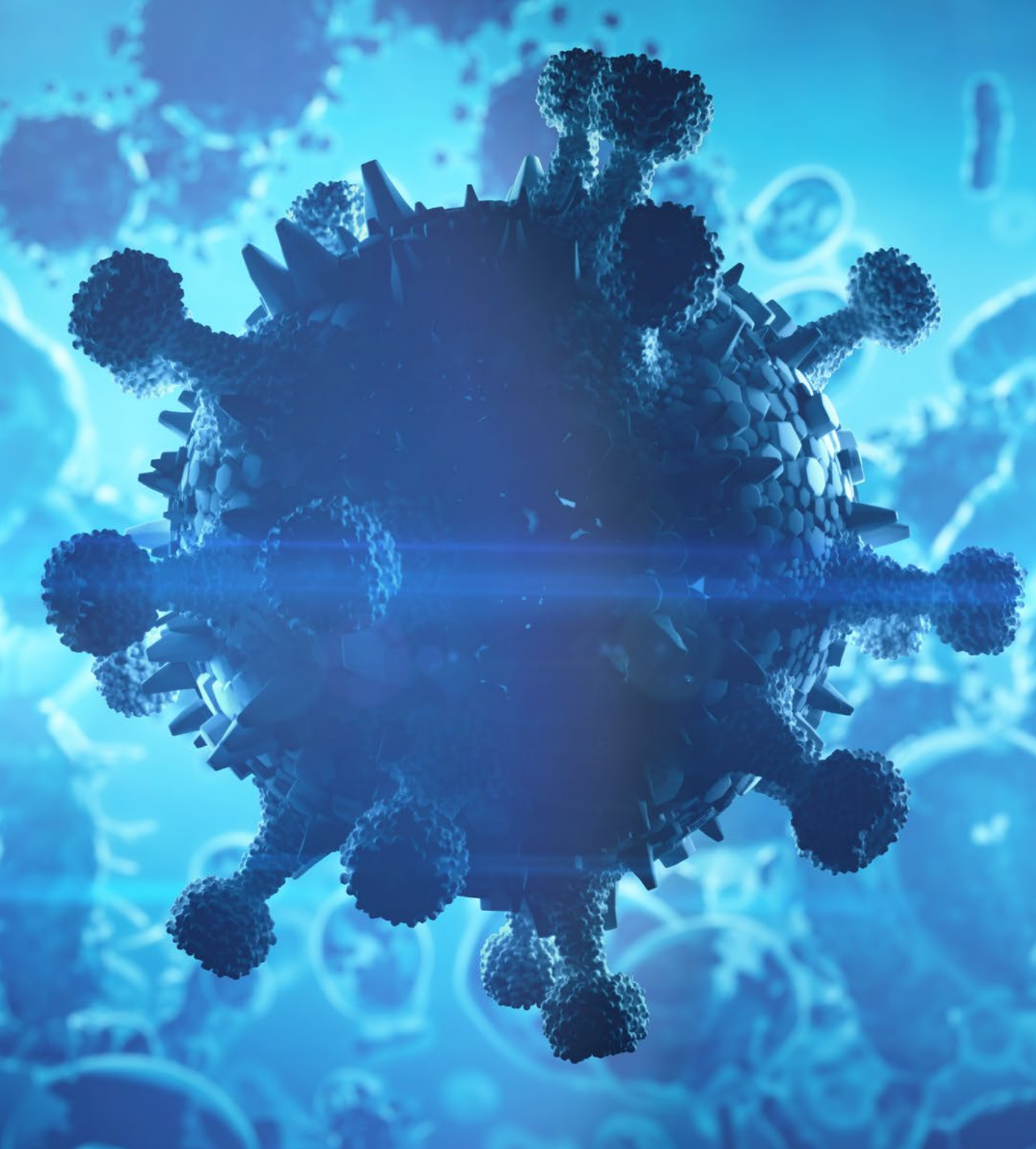
THE NSF-50 CERTIFIED ULTRABLUE SERIES IS DEVELOPED FOR DISINFECTION AND COMBINED CHLORINE REMOVAL IN SWIMMING POOLS, OPTIMIZED FOR THE LOWEST POSSIBLE OPERATING COSTS.



KEY HIGHLIGHTS

- Compact in-line design
- NSF-50 Certified for validated safety & performance
- Easy maintenance and installation
- Optimized connection sizes that reduce head loss
- Single ended lamp for easy tool-free lamp service
- Medium-pressure ULTRATHERM 9 000-hour lamp lifetime
- High-grade electropolished stainless steel 316L offering excellent resistance against chlorides.
- ÖNORM M5873-1 certified sensor with Super Duplex sensor housing
- PLC-based controller for easy integration

MARKET LEADING ENERGY EFFICIENCY



CORE BENEFITS OF UV

UV TECHNOLOGY IS A GLOBALLY ACCEPTED SOLUTION FOR WATER DISINFECTION AND COMBINED CHLORINE REMOVAL.

The demand for cost-efficient solutions to provide high quality disinfected swimming pool water are at an all-time high and will only increase in the future. UV disinfection solves this complex challenge, being able to meet the strictest requirements regarding disinfection and combined chlorine removal.

Improved technological and design configurations have made UV a viable OPEX and CAPEX solution for swimming pools of all sizes.

Choosing to include UV as a secondary disinfection method ensures protection against chlorine resistant pathogens such as Cryptosporidium and Giardia.

The scientifically optimized ULTRABLUE systems are designed to remove potential health issues associated with combined chlorine, to ensure a better bather experience.

The ULTRABLUE systems are easy to install, maintain, and thoroughly cost-optimized. The third-party approvals for performance and quality ensure complete peace of mind, employing the best available solution.

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SWIMMING POOL UV DISINFECTION

THE WORLD HEALTH ORGANIZATION (WHO) URGES POOL OWNERS TO FOCUS ON LOWERING CHLORINE BY-PRODUCTS THAT ARE PRESENT IN THE WATER AND AIR OF RECREATIONAL POOL ENVIRONMENTS.

Many facilities are now installing UV as a dual-purpose technology. A technology that requires highly optimized and scientifically proven testing.

The ULTRABLUE range is verified by the EU government, showing proven scientific results in terms of reducing harmful and potentially carcinogenic chloramines from the water. These chloramines can pose a critical threat to the health and overall experience of the users.

The ULTRABLUE series is scientifically proven to achieve a 99.9% removal of Cryptosporidium in a single pass.

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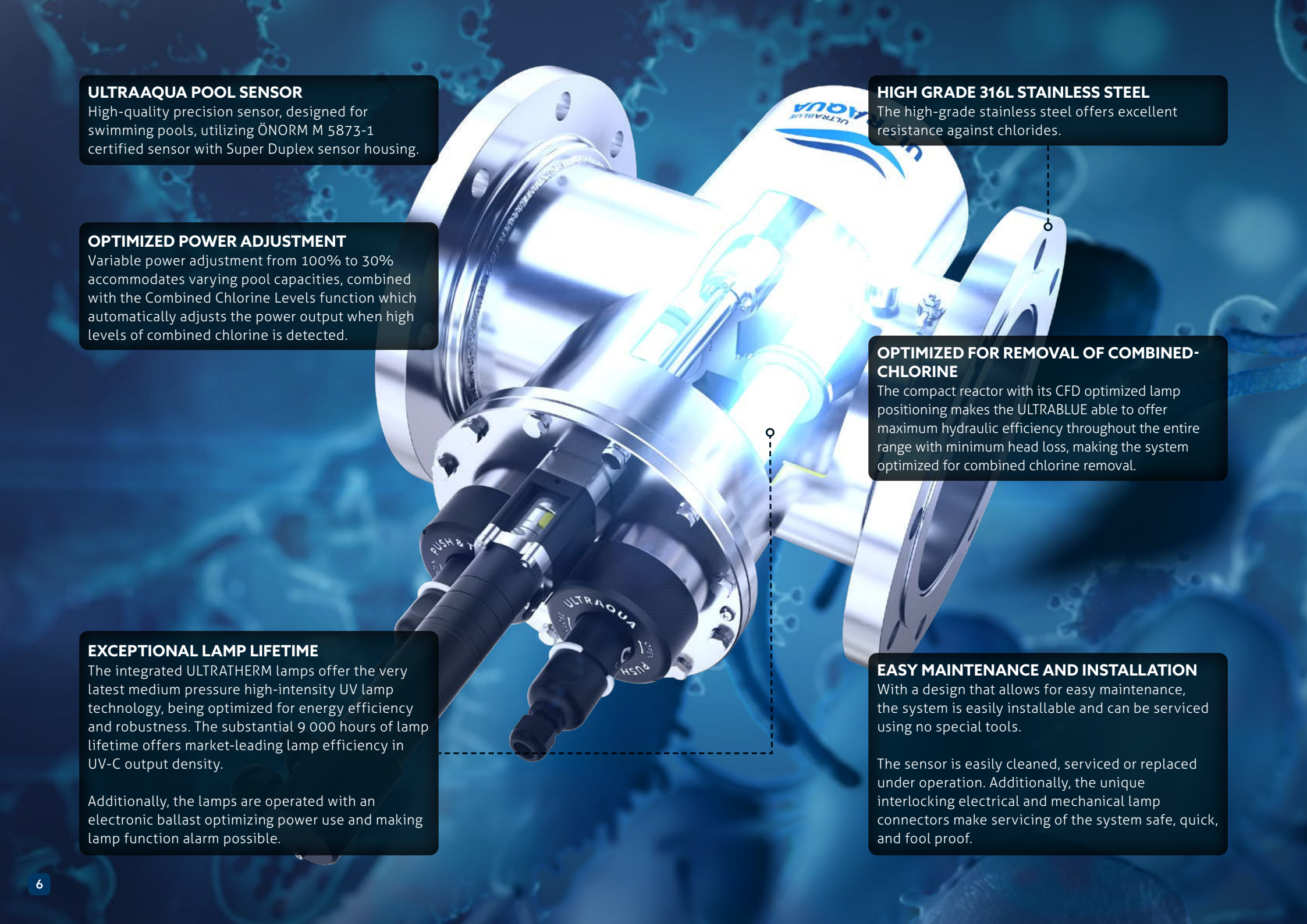
200 SYSTEMS INSTALLED

55 ACTIVE SITES

50.000 BATHERS PROTECTED



ULTRAAQUA POOL SENSOR

High-quality precision sensor, designed for swimming pools, utilizing ÖNORM M 5873-1 certified sensor with Super Duplex sensor housing.

OPTIMIZED POWER ADJUSTMENT

Variable power adjustment from 100% to 30% accommodates varying pool capacities, combined with the Combined Chlorine Levels function which automatically adjusts the power output when high levels of combined chlorine is detected.

EXCEPTIONAL LAMP LIFETIME

The integrated ULTRATHERM lamps offer the very latest medium pressure high-intensity UV lamp technology, being optimized for energy efficiency and robustness. The substantial 9 000 hours of lamp lifetime offers market-leading lamp efficiency in UV-C output density.

Additionally, the lamps are operated with an electronic ballast optimizing power use and making lamp function alarm possible.

HIGH GRADE 316L STAINLESS STEEL

The high-grade stainless steel offers excellent resistance against chlorides.

OPTIMIZED FOR REMOVAL OF COMBINED-CHLORINE

The compact reactor with its CFD optimized lamp positioning makes the ULTRABLUE able to offer maximum hydraulic efficiency throughout the entire range with minimum head loss, making the system optimized for combined chlorine removal.

EASY MAINTENANCE AND INSTALLATION

With a design that allows for easy maintenance, the system is easily installable and can be serviced using no special tools.

The sensor is easily cleaned, serviced or replaced under operation. Additionally, the unique interlocking electrical and mechanical lamp connectors make servicing of the system safe, quick, and fool proof.

SERVICE & SUPPORT

ULTRAAQUA IS A GLOBAL COMPANY OFFERING WORLDWIDE SERVICE AND SUPPORT, WITH ITS HEAD OFFICE BASED IN DENMARK.

With over 10 000 systems installed in over 120 countries, ULTRAAQUA offers extensive support regarding installation and maintenance through a wide-ranging network of regional offices.

The technical support team at our head office provides 24-hour remote service upon agreement to reduce the risk of emergencies.

At ULTRAAQUA, it is our goal to provide a complete product experience for our customers, from specifying requirements to ongoing operational maintenance. This naturally means that our responsibility does not stop after the UV system reaches its destination.

By maintaining close collaboration with all clients, a trouble-free process is ensured throughout all post-installation activities.

The support services include, but are not limited to:

- General technical support
- Advanced 24-hour support upon agreement
- Spare part ordering and shipping services
- Commissioning
- On-site training
- On-site technical support

If necessary, qualified engineers are available for on-site training and technical support, able to assist in setting up the complete solution. To ensure maximum system performance and reliability, extensive information and technical knowledge are always provided.

R&D CAPACITIES

SINCE 1996, THE R&D DEPARTMENT HAS BEEN THE BACKBONE OF ULTRAAQUA.

Employing the brightest industry specialists with diverse expertise to drive continuous innovation has been vital to the company's success. The research department is led by Ole Grønborg and Morten Møller Klausen, who are industry leaders in water treatment research, working toward a much-needed paradigm shift in commercial swimming pool sanitation.

The ULTRAAQUA R&D department conducts, supports, and pioneers some of the latest developments in the water industry. These projects are often carried out in collaboration with specialists from municipalities, universities, top-tier consultancies, and international companies. The projects primarily focus on developing unique and advanced chemical-free disinfection solutions for some of the world's most complex water quality challenges.

In addition to ultraviolet sterilization, research on technologies such as ozonation, biofiltration, and particle filtration has been conducted, resulting in deep scientific insights into achieving the world's healthiest bathing water.

This ultimately allows ULTRAAQUA to position itself among the industry leaders in UV disinfection, providing customers with the best available solutions.

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UV DISINFECTION SYSTEMS

UV SYSTEM	ULTRABLUE 1-600SS	ULTRABLUE 2-600SS	ULTRABLUE 1-2500SS	ULTRABLUE 2-2500SS	ULTRABLUE 2-4000SS	ULTRABLUE 3-4000SS
Product ID	25076 (24252)	25077 (24255)	25078 (24258)	25079 (24261)	25080 (24164)	25081 (24267)
Approvals	NSF-50, CE (UL)					
UV LAMPS & MONITORING						
Total Lamps	1	2	1	2	2	3
ULTRATHERM MPHI Lamp	600 W	600 W	2500 W	2500 W	4000 W	4000 W
Total Lamp Power	600 W	1200 W	2500 W	5000 W	8000 W	12000 W
Lamp Lifetime	9000 Hours					
Lamp Change Safety	Yes					
UV Monitoring / Sensor House Material	UV Intensity Sensor - ÖNORM M5873 Certified SS316L / SS316L					
Variable Power	Automatic ULTRADOSE Pacing 50-100%		Automatic ULTRADOSE Pacing 30-100%			
Single Lamp Control	N/A	ULTRASWITCH Setting	N/A	ULTRASWITCH Setting		
UV CHAMBER						
Connection Size	DN80 (ANSI3)	DN100 (ANSI4)	DN150 (ANSI6)	DN200 (ANSI8)	DN250 (ANSI10)	DN300 (ANSI12)
Connection Type	DN PN10 (ANSI Class 150) - [Other Flanges Available on Request]					
Design Pressure	10 Bar					
Chamber Material	SS316L					
Internal / External Finish	Electropolished Inside/Out					
Lamp/Wiper Access Single Ended	Yes					
Quartz Type	High Purity Fused Quartz					
Mounting	Free Standing					
ULTRAWIPER System	Automatic Mechanical Wiper with PTFE-Electrical Motor 24V DC					
Temperature Probe	2×Temperature Probe - PT100 (Thermal Cut Out 50° (122F))					
Vent / Drain Ports / Air Port	1/2" BSP Plugged					
Ingress Protection	IP68 (NEMA4X)					
Installation	Horizontal / Vertical (Lamps Must Be Horizontal)					
Minor Wetted Parts	PTFE, PVDF, FKM					
Dry Weight	19 kg (41 lb)	26 kg (57 lb)	31 kg (68 lb)	46 kg (101 lb)	53 kg (117 lb)	81 kg (179 lb)
Wet Weight	24 kg (53 lb)	35 kg (77 lb)	42 kg (93 lb)	70 kg (154 lb)	87 kg (192 lb)	134 kg (295 lb)
CONTROL CABINET						
Cabinet Material	Powder Painted Steel [SS304, SS316L]					
Cabinet Size (H×W×D) mm	700×500×260 mm (27.5"×19.6"×10.2")		800×800×300 mm (31.4"×31.4"×11.8")		1000×800×400 mm (39.3"×31.4"×15.7")	
Cable Length	4 Meters [Max. 30 Meters] (14ft [99ft Max])					
Installation & Ambient	Wall Mount 0-45°C (32–113°F) Non-Condensing					
Ingress Protection	IP54 (NEMA13)					
Thermal Control	Fan Cooled System					
Panel Interlock Switch	90 Degree Two Position Rotary Switch					
Control Logic	PLC					
Interface/HMI	ADV.: 7" ULTRATOUCH					
SCADA Communication	MODBUS TCP/IP (Ethernet RJ45)					
Analogue 4-20mA I/O	Dose Output / Flow Input / Combined Chlorine Input					
Combined Chlorine Control	Power Mode Based on Combined Chlorine Input - User Selectable					
External Wiring	Remote ON/OFF, Safety ON/OFF, System Status, Alarm					
Event Log	Power ON/OFF, Lamps ON/OFF, Alarms					
Data Log	Alarm, Event & Data (UV Dose, UV Intensity, Flow & Combined Chlorine)					
Power Consumption	3 A	6 A	14 A	28 A	12 A	24 A
Power Supply	1x 208/230VAC +/- 10% +N+PE 50/60Hz				3x 400VAC +/- 10% +N+PE 50/60Hz	
Cabinet Weight	50 kg (110 lb)		60 kg (132 lb)		75 kg (165 lb)	
PERFORMANCE						
Flow @ 40mJ/cm² 95% UVT (3log Crypto + Germicidal Disinfection)	24 m³/h (106 GPM)	58 m³/h (255 GPM)	122 m³/h (537 GPM)	350 m³/h (1541 GPM)	630 m³/h (2774 GPM)	1050 m³/h (4623 GPM)
Flow @ 60mJ/cm² 95% UVT (3log Crypto + Combined Chlorine Breakdown)	32 m³/h (141 GPM)	67 m³/h (295 GPM)	148 m³/h (652 GPM)	425 m³/h (1871 GPM)	810 m³/h (3566 GPM)	1280 m³/h (5636 GPM)

[Options are marked with square brackets] - Specifications are subject to change without notice. **Version: 25.0**

TECHNOLOGY OVERVIEW & VALIDATIONS

THE UV SYSTEMS OF ULTRAAQUA HAS UNDERGONE EXTENSIVE TESTING AND PASSED THE WORLD'S MOST RIGOROUS TESTS FOR VALIDATION AND APPROVAL BY RECOGNIZED LEADING CERTIFICATE PROVIDERS.

This means that reliable and thoroughly tested solutions are guaranteed.

The **NSF-50** validation is the most widely recognized certification in the industry. The validation ensures that the ULTRABLUE series have undergone rigorous testing to demonstrate compliance with industry-leading standards of safety and performance.

The **AMS (Analog Mixed Signal) verification** ensures that the electronic components are compliant with the latest industry-standard, allowing smooth and quick signal transmission among the electrical components used in data tracking and storage.

The **NIPH (Norwegian Institute of Public Health) type approval** ensures that all UV disinfection units meets the requirements for UV dosage. The approval means that ULTRAAQUA is able to distribute selected UV systems in Norway and The Faroe Islands.

The **DVGW certification** assures that critical technical requirements are met regarding hygiene, safety, and general functionality. DVGW is an unbiased technical-scientific association based in Germany, specialized in gas and water industries.

The **ETV-EU verification** is a third-party validation of new innovative environmental technologies, ensuring product credibility for the buyer.

The ISO 9001 certification ensures that all processes are documented and controlled to maintain and continuously improve the quality of our products and services. The certification reflects a dedication to providing high-quality solutions for every single project.

The **CE marking** signifies that the product has been assessed to meet high safety, health, and environmental protection requirements.

The **UL safety mark** is your guarantee of trusted safety of performance, meaning that the product has been certified to meet scientific safety, quality, or security standards.

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COMPANY HISTORY

ULTRAAQUA IS AN INTERNATIONAL MANUFACTURER OF ADVANCED UV WATER DISINFECTION SYSTEMS FOR A WIDE RANGE OF WATER TREATMENT APPLICATIONS.

The company was founded in 1996 by two Danish scientists, with the mission of solving the increasing global water safety challenges, by combining extensive research, innovation, and technology. Today, more than 10 000 UV disinfection systems have been supplied worldwide, to help create a more sustainable world.

ULTRAAQUA operates through a carefully selected partner network, with activity in more than 120 countries. The partner network has been key to the success of ULTRAAQUA, making it possible to deliver cutting-edge UV disinfection systems across the globe.

Continuous research and innovation activities have made it possible to maintain the position of delivering cutting-edge solutions to clients with diverse requirements in different applications.

Global experience combined with advanced knowledge of dealing with varying customer requirements, ensures an optimal solution to accommodate every client. Combined with a dedicated support experience, a streamlined operational process is guaranteed.

The validity, experience, and trustworthiness are proven through our wide range of acquired certificates, patents, and trademarks.

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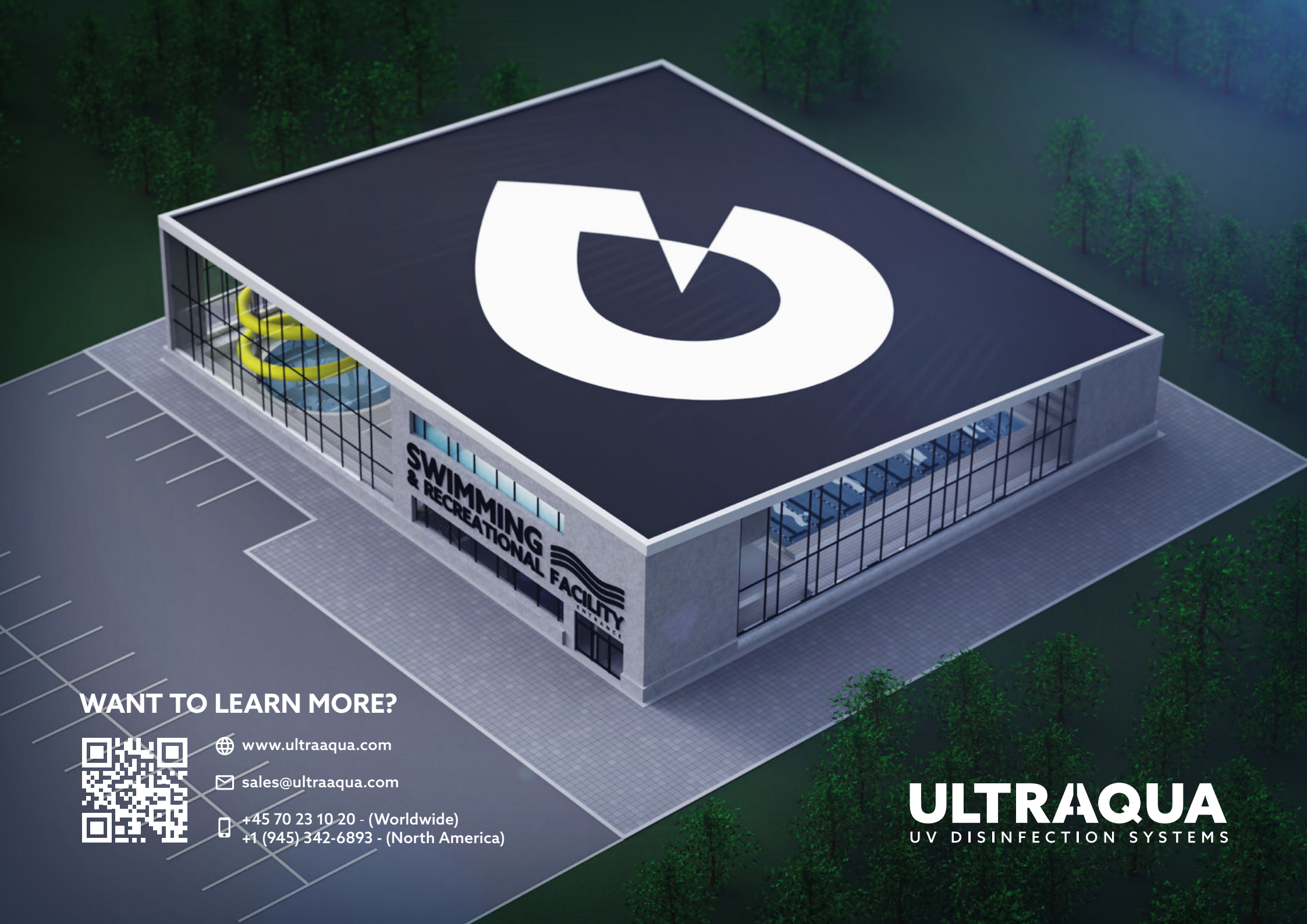

WANT TO LEARN MORE?

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