



REDUCE
CARBON
FOOTPRINT

Lifetech

Ozone, UV and AOP Expert

**SWIMMING POOLS
& WHIRLPOOLS**

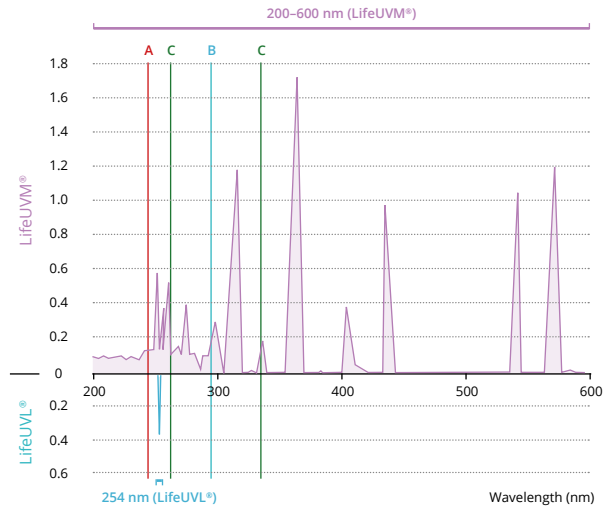
OVERVIEW

Low-pressure UV systems
Medium-pressure UV systems
Ozone water treatment
LifeOX® AOP system

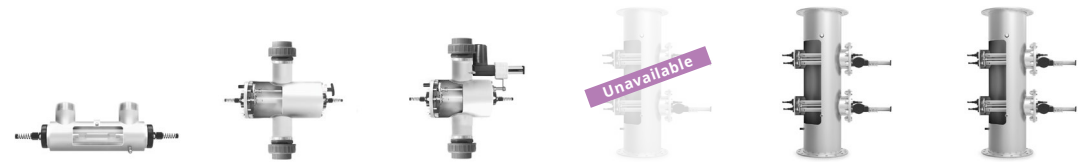
MEDIUM-PRESSURE UV SYSTEMS

Germicidal UV lamps generate UV radiation in such a spectrum that effectively destroys bacteria, fungi and viruses. The microorganisms include several different groups of bacteria (viruses, bacteria, fungi, algae and protozoa) that cause different types of diseases. UV radiation is very effective against *Cryptosporidium* and *Giardia*. They are organisms resistant to chlorine and pose major health risks. Another advantage of UV radiation is that it is tasteless and odourless.

Spectral radiation force (relative units)



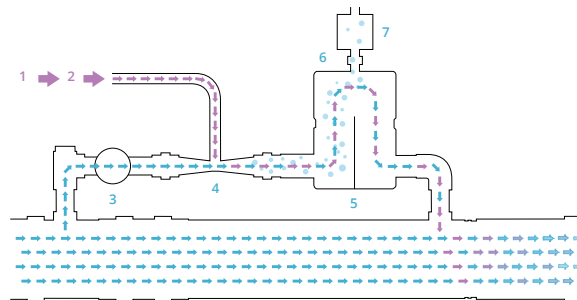
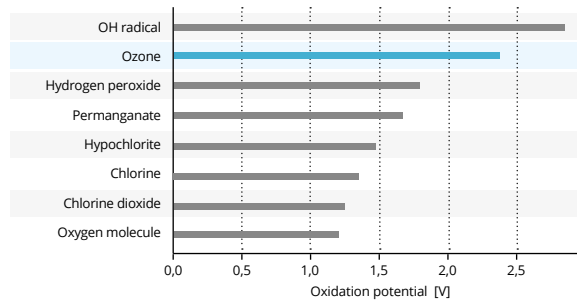
200-600 nm	Polychromatic emission spectrum of medium-pressure lamps
254 nm	Monochromatic emission spectrum of low-pressure lamps
245 nm	Reduction of monochloramine (A)
297 nm	Reduction of dichloramine (B)
260, 340 nm	Reduction of trichloramine (C)



Model	PROFIFURE	PROFITINY	CHARM	ECO	CLEAR	TOP
Series	Classic	Classic	Classic	Direct	Direct	Direct
Expected life of LifeUVM® UV lamp	5,000	5,000	10,000	8,000	8,000	18,000
Water flow (m³/h) (Public pools and whirlpools)	4.7	9-27	9-33	33-616	33-616	33-910
Water flow (m³/h) (Private and semi-public pools and whirlpools)	12-23	18-38	18-42			
Temperature sensor	✓	✓	✓	✓	✓	✓
UV sensor					✓	✓
Modbus connection					✓	✓
Material	Stainless-steel reactor 316L with internal UV mirror	Stainless-steel reactor 316L with internal UV mirror	Stainless-steel reactor 316L with internal UV mirror	Stainless-steel reactor 316L with internal UV mirror	Stainless-steel reactor 316L with internal UV mirror	Stainless-steel reactor 316L with internal UV mirror
Manual wiper						
Automatic wiper						
Power supply	 Magnetic power supply	 Magnetic power supply	 Advanced electronic power supply (LifeAGE® technology)	 Magnetic power supply	 Magnetic power supply	 Advanced electronic power supply (LifeAGE® technology)
Total power input of UV lamps (kW) / phase	0.25 / I	0.4 / I	0.4-0.6 / I	1 / I - 12/III	1 / I - 12/III	1 / I - 18/III
Display	 LED indication	 LED indication	 LED display	 LDC display	 TS touch display	 TS touch display

OZONE WATER TREATMENT

Ozone is one of the strongest oxidising agents and is used for drinking and waste water treatment. Ozone is one of the most advanced ways to treat pool water. The main advantage of ozone is that harmful substances, microorganisms, odours or paint are removed by oxidation, without the formation of harmful chlorine by-products. Ozone is used for disinfection and improvement of organoleptic properties of water, as well as its flocculation capabilities. Ozone reduces the formation of haloform precursors, serves to remove iron and manganese from the water, inactivates microorganisms, such as algae.



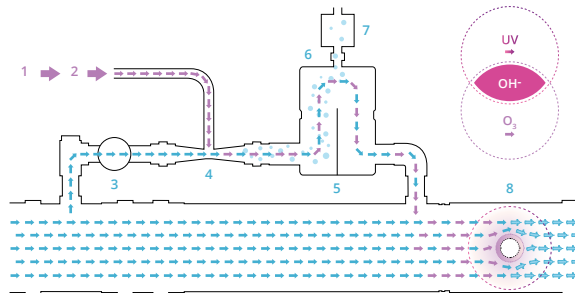
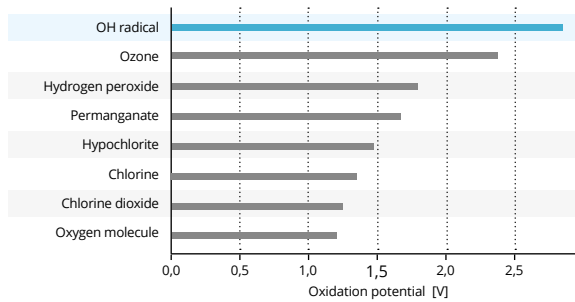
- 1 Air dryer / Oxygen concentrator
- 2 Ozone generation
- 3 Auxiliary pump
- 4 Injector
- 5 Reaction / Degassing tank
- 6 Degassing valve
- 7 Ozone destroyer in degassing tank



Model	EXCLUSIVE
Ozone production (g O ₃ /h)	2-12.5
Maximum pool volume (m ³) (Public pools and whirlpools)	up to 600
Maximum pool volume (m ³) (Private pools and whirlpools)	up to 1,200
Ozone generation technology	Corona discharge
Power control	10-100 %
Connection system	In by-pass
Installation	Plug & Play
Material	PVC-U
Ozone generation	Air dryer/ Oxygen concentrator
Input power (kW)	1.0-1.6
Dimensions (mm)	550x450x1,100 - 1,100x500x1,200
Weight (kg)	55-121

LIFEFOX® AOP SYSTEM

LifeFOX®, developed by LIFETECH, uses state-of-the-art water treatment technology, namely the advanced oxidation process (AOP) technology. LifeFOX® uses three proven water treatment technologies – ozone, low- or medium-pressure UV systems. LifeFOX® produces OH-radicals in treated water that have a much higher oxidation potential than ozone or hydrogen peroxide alone. LifeFOX®M is also the best available technology for removing bound chlorine from pool water.



- 1 Air dryer + Oxygen concentrator
- 2 Ozone generator
- 3 Auxiliary pump
- 4 Injector
- 5 Reaction / Degassing tank
- 6 Degassing valve
- 7 Ozone destroyer in degassing tank
- 8 UV lamp



Model	COMBI OZONE/UV .EP	LIFEFOX® M .EP
Maximum pool volume (m ³) (Public pools and whirlpools)	Not restricted – modular system	Not restricted – modular system
Maximum pool volume (m ³) (Private pools and whirlpools)	Not restricted – modular system	Not restricted – modular system
Water flow (m ³ /h) (Public pools and whirlpools)	up to 12,5 by unit	up to 250 by unit
Ozone generation technology	Corona discharge	Corona discharge
AOP technology	Ozone + UV	Ozone + UV
UV lamp type	Low-pressure LifeUVL	Medium-pressure LifeUVM
Unique continuous power control from 10% to 100%	✓	✓
Connection system	In pipes (in-line)	In pipes (in-line)
Material	PVC-U	Stainless-steel reactor 316L with internal UV mirror
Ozone generator	Air dryer / Oxygen concentrator	Air dryer / Oxygen concentrator
Input power (kW)	1.1–1.9	1,4–9
Dimensions (mm)	550x450x1,100 – 1,300x750x1,200	985x847x1,202 – 1,500x1,300x2,000
Weight (kg)	59–180	100–280

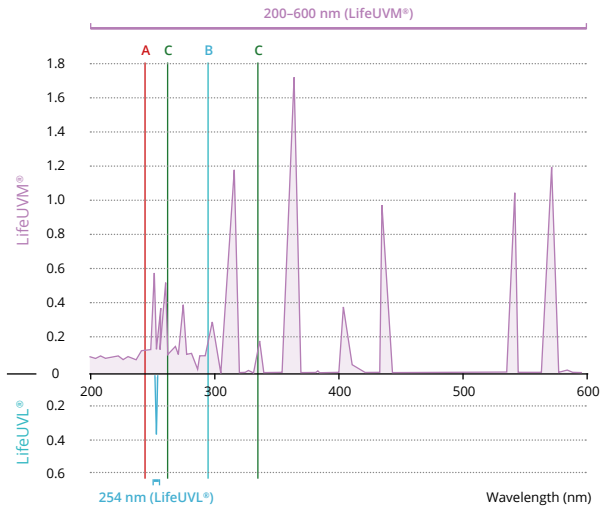


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LOW-PRESSURE UV SYSTEMS

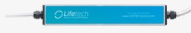
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Spectral radiation force (relative units)



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Model	NW-EB
Expected life of UVL UV lamp	13,000
Water flow (m³/h) (Private pools and whirlpools)	24-29
Single lamp / More lamps	Single lamp
Material	Stainless-steel reactor 316L with internal UV mirror
Power supply	 Electronic ballast
Total power input of UV lamps (W) / phase	48 / 1 - 87 / 1



Contact



Please do not hesitate to contact us with any questions or comments.

We speak Czech, English, German and Russian.

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