NUVONIC

formerly Aquionics, Berson, Hanovia and Orca GmbH

PureLine ECO

OPTIMIZED UV TREATMENT FOR INDUSTRIAL & COMMERCIAL APPLICATIONS

Engineered with precision and driven by sustainability, ECO stands as a revolutionary UV system that promises to reshape the landscape of water treatment in the industrial & commercial markets

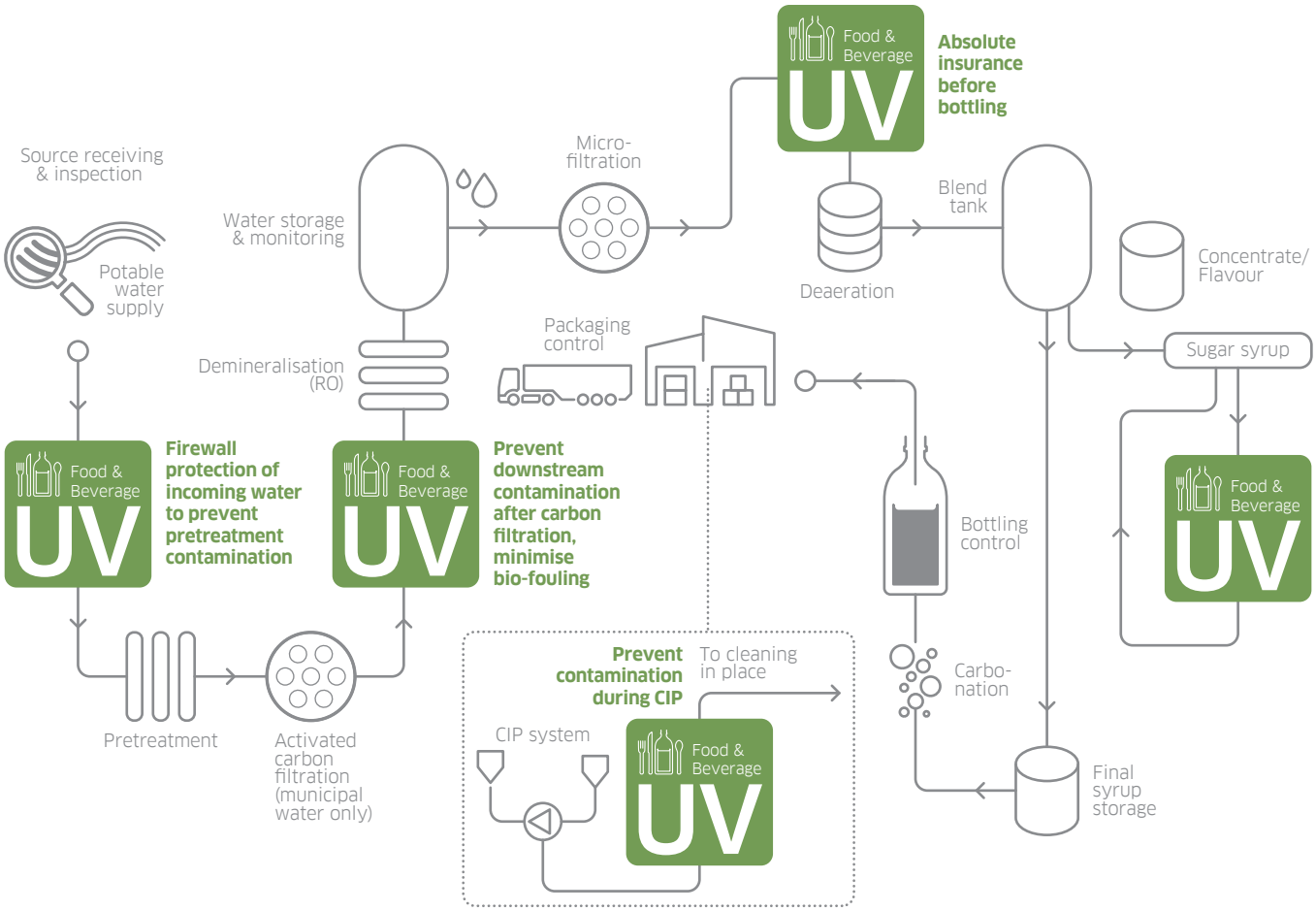
Efficiency: Reduce your carbon footprint significantly while maintaining the highest quality standards in your operations.

Compact Brilliance: ECO fits where others can't, delivering uncompromised results in limited space.

Optimized Performance: ECO is optimised for peak performance, providing consistently reliable water treatment solutions.

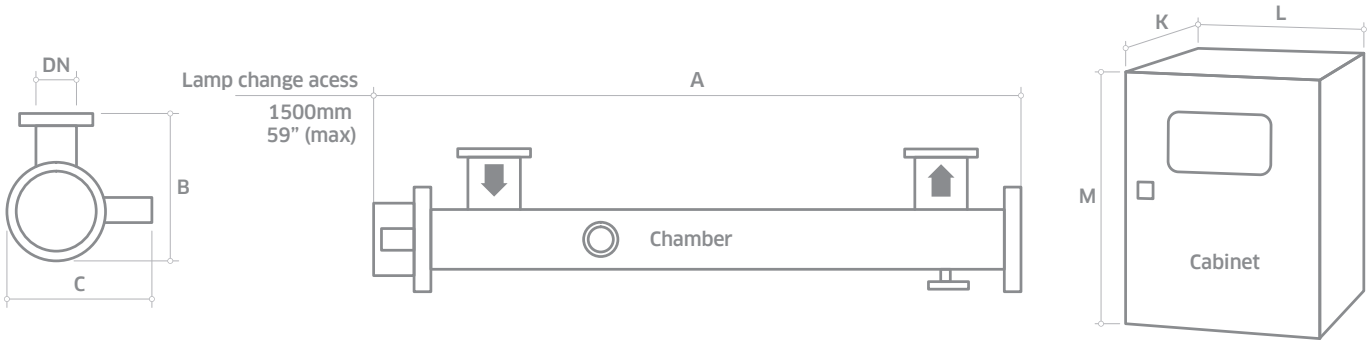
Application Optimised UV for Food & Beverage

POTENTIAL LOCATIONS OF THE PURELINE ECO



KEY FEATURES	WHAT IT GIVES YOU	BENEFITS FOR YOU
INTELLIGENCE		
UV intensity monitor measuring active wavelengths	Continuous verification of performance with in-built low intensity alarm	Easy to monitor and log system performance
OPTIMIZATION		
UV water treatment	Protect your process waters from microbiological contamination such as chlorine resistant *Cryptosporidium* and *Giardia*	Does not affect taste and colour of final product No chemicals used
Designed for the food and beverage industry	FDA-approved materials used for all wetted parts	Industry compliant materials
	*Chamber with tri-clamp connections and < 0.38 µm internal finish	Sanitary design
INTEGRATION		
Compact design	Can be fitted to skids	Easy integration
	Can be retrofitted to existing process	

*Option



MODEL NUMBER	FLOW* (m³/h)	MAX POWER (W)	LAMP (QTY)	CHAMBER SIZE (mm)				CABINET			APPROX WEIGHT (kg)	
				A	B	C	DN	K	L	M	Chamber w/o wiper	Cabinet
Pureline ECO 4	4	90	1	745	210	245	25	180	470	535	10.5	20.5
Pureline ECO 8	9	150	1	1245	230	245	50	180	470	535	12.3	20.5
Pureline ECO 15	16.5	250	1	1245	230	245	50	180	470	535	12.3	20.5
Pureline ECO 32	30.5	360	1	1785	230	245	80	180	470	535	22.6	20.5
Pureline ECO 40	34	380	1	1785	335	305	80	180	470	535	41.2	20.5
Pureline ECO 85	78	750	2	1785	335	305	100	210	490	600	42	27.6
Pureline ECO 125	116	1080	3	1785	335	305	**125	210	490	600	43	29.1
Pureline ECO 215	180	1420	4	1785	455	355	150	210	500	700	66.4	35.5
Pureline ECO 225	190	1750	5	1785	455	355	150	210	500	700	66	36.9
Pureline ECO 330	300	1750	5	1790	525	440	200	210	500	700	114	36.9
Pureline ECO 350	315	2100	6	1790	525	440	200	210	510	800	115	44.5
Pureline ECO 380	330	2440	7	1790	525	440	200	210	510	800	116	45.9

*Disinfection capacity based on UV Dose 30 mJ/cm2 at 98% T10, end of lamp life. Flow rates may differ with tri-clamp connections.
**the DN is 6" when connection type is tri-clamp
Allow dimension L in front of cabinet for door opening and panel access.
All dimensions are approximate for clearance purposes only. We have a policy of continuous product development, exact drawings are available on request.
All specifications are subject to change without notification. Your distributor or our account manager can advise on correct sizing and specification requirements.

UV CHAMBER

Material:	Stainless steel 316L / 1.4404
Process (Mating) connection:	PN10 to EN1092-1
End plate:	Removable plate
Drain connection:	Tri-clamp 1" BS4825
Degree of protection:	IP54 equivalent to NEMA 12
Internal finish:	< 0.5 µm Ra (Welds ground out)
Lamp type:	Low Pressure Amalgam
Expected Lamp life:	9,000 hours
UV sensor:	Dry sensor
Temperature sensor	Yes, PT100
Seals:	EPDM, FDA 21 CFR 177.2600
Maximum CIP temperature:	95°C with cabinet electrically isolated
Working fluid temperature:	5-40°C
Chamber mounting:	Horizontal only
Operating pressure:	10 bar

OPTIONS

- Interconnecting cable lengths: 5 m
- Chamber internal finish: < 0.38 µm Ra (Welds ground out)
- Document support pack
- Process (Mating) connection: Tri-clamp BS4825 (for ECO 225 and smaller models)
- ANSI B 16.5 Class 150 process (mating) connection
- Carbon Steel Cabinet

APPROVALS

CE marked, UL

CABINET (UV CONTROLLER)

Material:	Stainless steel 304
Controller:	UV Controller
HMI:	7" Touch screen
Interconnecting cable lengths:	3 m
IP rating:	IP54 / NEMA 12
Power supply:	220 V ± 10%, 50/60 Hz, single phase, L+N+G. 110V (for ECO 4-215)
Operating temperature range:	5-40°C
Humidity:	< 90% no condense cabinet fan installed for ECO 32 and larger systems
Control & Display:	Stepless power adjustment 50-100%
	All alarms and warnings
	Fixed dose running
	Water temperature
	Lamp running hours
	Flow rate (m³/h or GPM)
	UV dose
Alarm & Warning:	Low UV dose
	Lamp end pre-warning (time adjustable)
	Lamp fault alarm
	Chamber over temperature alarm
	UV sensor fault alarm
	Temperature sensor fault alarm
	Warning for lamp and quartz resetting
Input:	Flow 4-20 mA
	T_{10} 4-20 mA
	Remote On/Off
Output:	UV dose 4-20 mA
	Any system alarm VFC
	Any system warning VFC
	Low UV dose alarm VFC
	Lamp fault alarm VFC
	Lamp preheat VFC
	Lamp ready VFC

PureLine ECO

Also available in our ECO product range...

TOCLINE ECO

Breakdown and reduction of TOC using medium pressure lamp

PHARMALINE ECO

Reduce the bio-burden, protect against bio-fouling, lead to fewer CIP/SIP

Canada
+1 980 256 5700
americas@nuvonic.com

China
+86 216 167 9599
apac@nuvonic.cn

Germany
+44 175 351 5300
emea@nuvonic.com

Mexico
+1 980 256 5700
americas@nuvonic.com

United Kingdom
+44 175 351 5300
emea@nuvonic.com

USA
+1 980 256 5700
americas@nuvonic.com

NUVONIC

A Halma company

formerly Aquionics, Berson, Hanovia and Orca GmbH

2023 Nuvonic 910433-5000-03-EN

nuvonic.com

FM 29365