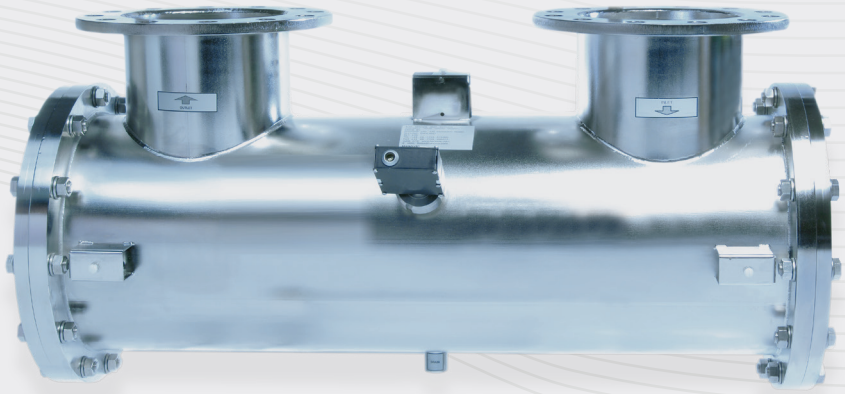
NUVONIC

formerly Aquionics, Berson, Hanovia and Orca GmbH



PureLine DO PH

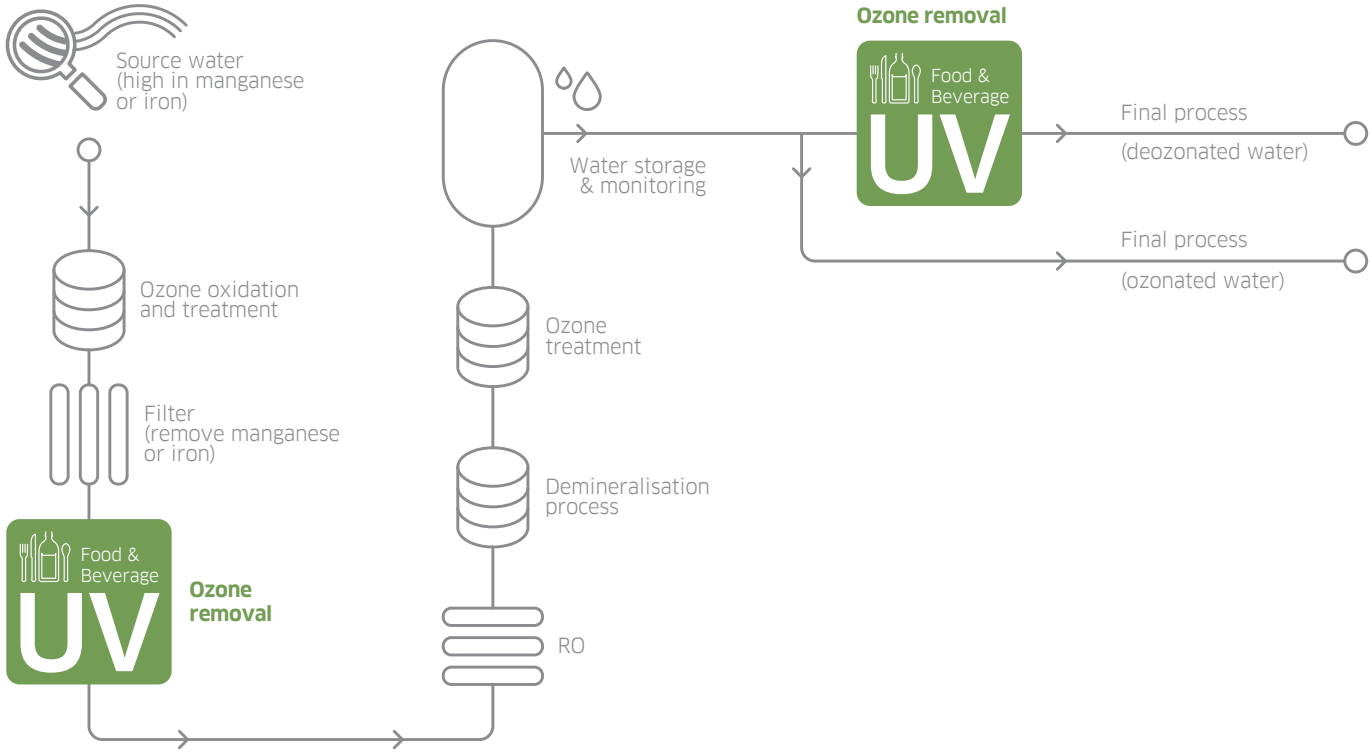
UV DEOZONATION FOR FOOD AND BEVERAGE

Our **PureLine DO PH UV** systems are aimed specifically at providing ozone removal and treatment for product and process water used in the food and beverage industry. When installed in a distribution loop the PureLine DO PH will remove residual ozone dosed into the water.

The UV system can be remotely controlled to turn off to allow residual ozone to treat the purified water loop during a SIP and then be turned on again to remove the ozone before the loop is put back into service. Each system comes with a UV monitor to measure the lamp output making it easy to monitor and log performance.

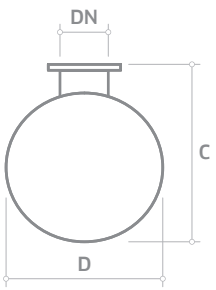
Application Optimised UV for Food & Beverage

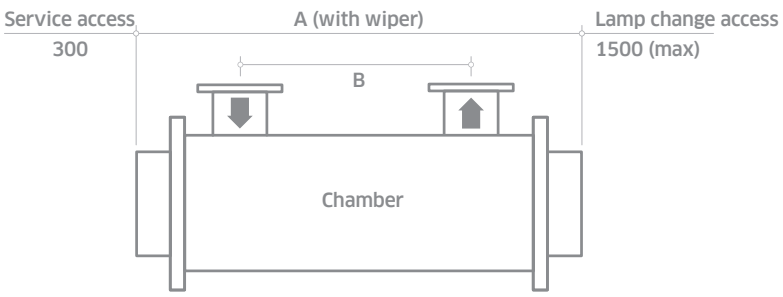
POTENTIAL LOCATION OF THE PURELINE DO PH™ OZONE REMOVAL IN FOOD AND BEVERAGE

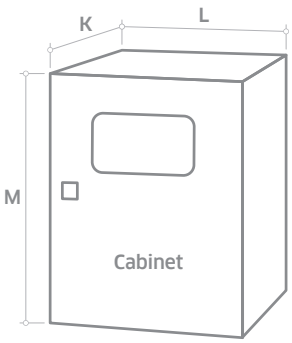


KEY FEATURES	WHAT IT GIVES YOU	BENEFITS FOR YOU
INTELLIGENCE		
UV intensity monitor measuring UV wavelengths	Continuous verification of performance with in-built low intensity alarm	Easy to monitor and log system performance
OPTIMISATION		
UV destruction of ozone	Optimised for ozone reduction	Proven reduction of ozone
Designed for the food and beverage industry	Flanged connections, standard internal finish	Reduced system costs where sanitary design is not critical
	FDA-approved materials used for all wetted parts	Industry compliant materials
	*Chamber with tri-clamp connections and <0.38 µm internal finish	Sanitary design
	*Automatic wiper (quartz cleaning)	Self cleaning
INTEGRATION		
Compact design	Can be fitted to skids	Easy integration
	Can be retrofitted to existing process	

*Option







MODEL NUMBER	MAX POWER (KW)	LAMP (QTY)	MIN T10(%)	DIMENSIONS (MM)								APPROX WEIGHT (KG)	
				A	B	C	D	DN	K*	L	M**	Chamber (Empty)	Control Cabinet
PureLine DO PH 0027	1.6	1	85	850	240	319	240	80	330	750	850	45	85
PureLine DO PH 0031	2.7	1	91	1300	710	319	240	80	330	750	850	50	85
PureLine DO PH 0057	4.4	1	81	1300	710	319	240	100	330	750	850	50	85
PureLine DO PH 0078	4.4	1	90	1300	710	420	290	100	330	750	850	65	85
PureLine DO PH 0119	5.8	1	84	1300	660	420	290	150	330	900	1100	65	165
PureLine DO PH 0181	5.8	1	93	1300	660	505	410	150	330	900	1100	140	165
PureLine DO PH 0255	7.4	1	90	1300	610	505	410	200	330	1100	1100	140	165
PureLine DO PH 0300	16.5	4	62	1300	660	420	290	150	330	1100	1600	65	282
PureLine DO PH 0350	16.5	4	62	1300	610	505	410	200	330	1100	1600	140	282
PureLine DO PH 0400***	25.2	6	62	1300	550	505	410	250	330	900	1100	140	165
									330	1100	1600		282

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.
* Allow dimension L in front of cabinet for door opening and panel access.
** M dimension includes the space for the cabinet mounting brackets but you need to allow space below the cabinet for cable entry and access (minimum of 250 mm).
*** System consists of two cabinets; separate dimensions K, L, M and weights are given for each cabinet.

UV CHAMBER

Material:	Stainless Steel 316L / 1.4404
Internal finish:	As bought pipe and tube, welds as laid, electropolished and passivated
External finish:	Satin polish (120 grit) electropolished and passivated
Process (mating) connections:	Flange EN 1092-1 PN16
Drain connection:	Tri-Clamp
End plate:	Removable end plate
Degree of protection:	IP65 equivalent to NEMA 4 but not for outside use
Arc tube (lamp):	Medium pressure
Arc tube enclosure:	Pure quartz (F200)
Expected lamp life:	8,000 hours
Temperature sensor:	Yes
UV monitor:	Wet UV monitor (down to minimum T10)
Working fluid temp:	1°C to 60°C (80°C unwiped)
Maximum CIP temperature:	95°C with cabinet electrically isolated
Hydrostatically pressure tested:	Yes to PED requirements EN 13445
Chamber mounting:	Horizontal only
Operating pressure:	6 bar (positive pressure only)
Seals:	EPDM, ADI free, EC 1935/2004, FDA 21 CFR 177.2600 approved

OPTIONS

Document Support Pack
Cabinet material: Stainless steel 316
Operation and Maintenance manual and printed Installation and Commissioning manual in Chinese, English, French, German and Spanish
Wiper: automatic (electrically driven)
Flange options: ANSI 150, JIS, Table 'E' and Tri-Clamp
Chamber internal finish: <0.38 µm welds polished out, electropolished and passivated
Lead length: 20 m, 30 m or 50 m cabinet to chamber
Maximum CIP temperature: 130°C (panel electrically isolated)
Welder Document Pack for chamber construction
Bleed valve: Hygienic valve with Tri-Clamp connection

OPTIONS (CONTINUED)

Skid mounting (not shipboard or earthquake zone)
Operating pressure: 10 bar
Air vent connection: Tri-Clamp blanked off
Stainless steel cabinet IP upgrade: air to air heat exchangers stainless steel IP 56, NEMA 4X, relative humidity <95% non-condensing. If fitted no UL listing. See sales drawings for sizes.
Aggressive water package: For 400 ppm to 20000 ppm chloride water
UV Disconnect™: Power cut-out for lamp access (except DO PH 0300 - 0400)
Water leak detection: Detects water leaks from quartz sleeve (except DO PH 0300 - 0400)
Arc tube enclosure: Doped quartz F240 (reduces performance)

CABINET (CONTROLLER PHOTON)

Material:	Polyester coated carbon steel
Degree of protection:	IP54 NEMA 12
Supply voltages (nominal):	DO PH 0027-0031: 95 V to 260 V (+/-10%) DO PH 0057-0181 and 0255: 190 V to 480 V (+/-10%)DO PH 0300-0400: 380 V to 480 V (+/-10%) 50/60 Hz
Operating temp range:	5°C to 45°C
Relative humidity:	<85% non-condensing
Cooling fans:	Yes
Interconnecting cable lengths:	10 m cabinet to chamber

CUSTOMER OUTPUTS

4-20 mA passive or active output:	UV intensity %
VFC outputs:	System warning, lamp ready, low UV intensity, common trip, remote reset, ELCB or water leak, system available, local or remote mode

CUSTOMER INPUTS

4-20 mA passive or active input:	Flow meter
VFC inputs:	Remote stop/start and remote reset

CUSTOMER COMMUNICATIONS PORT

None

APPROVALS

CE marked, UL listed E149108

PureLine DO

Also available in our Food & Beverage product range...

PURELINE DC+DCD

Dechlorination and Chlorine Dioxide removal

PURELINE D

Treatment as part of a multi-barrier approach

PURELINE PQ

3rd party bioassayed systems for critical treatment

PURELINE S

Sugar syrup treatment

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NUVONIC

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