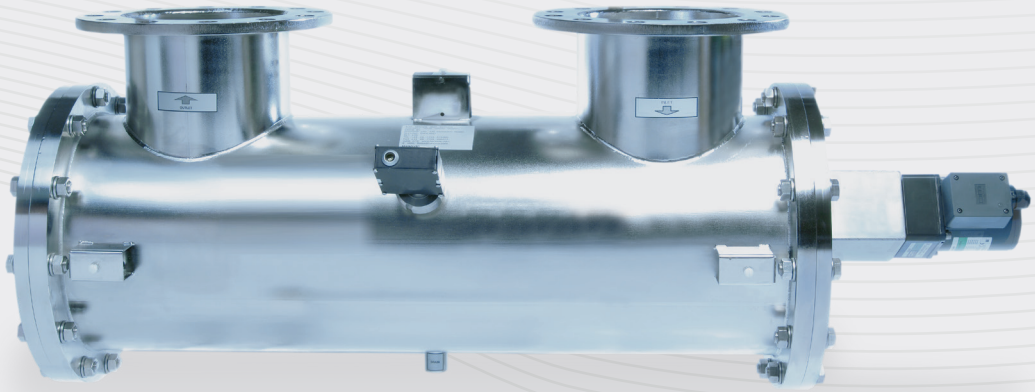
formerly Aquionics, Berson, Hanovia and Orca GmbH



RASLine D PH

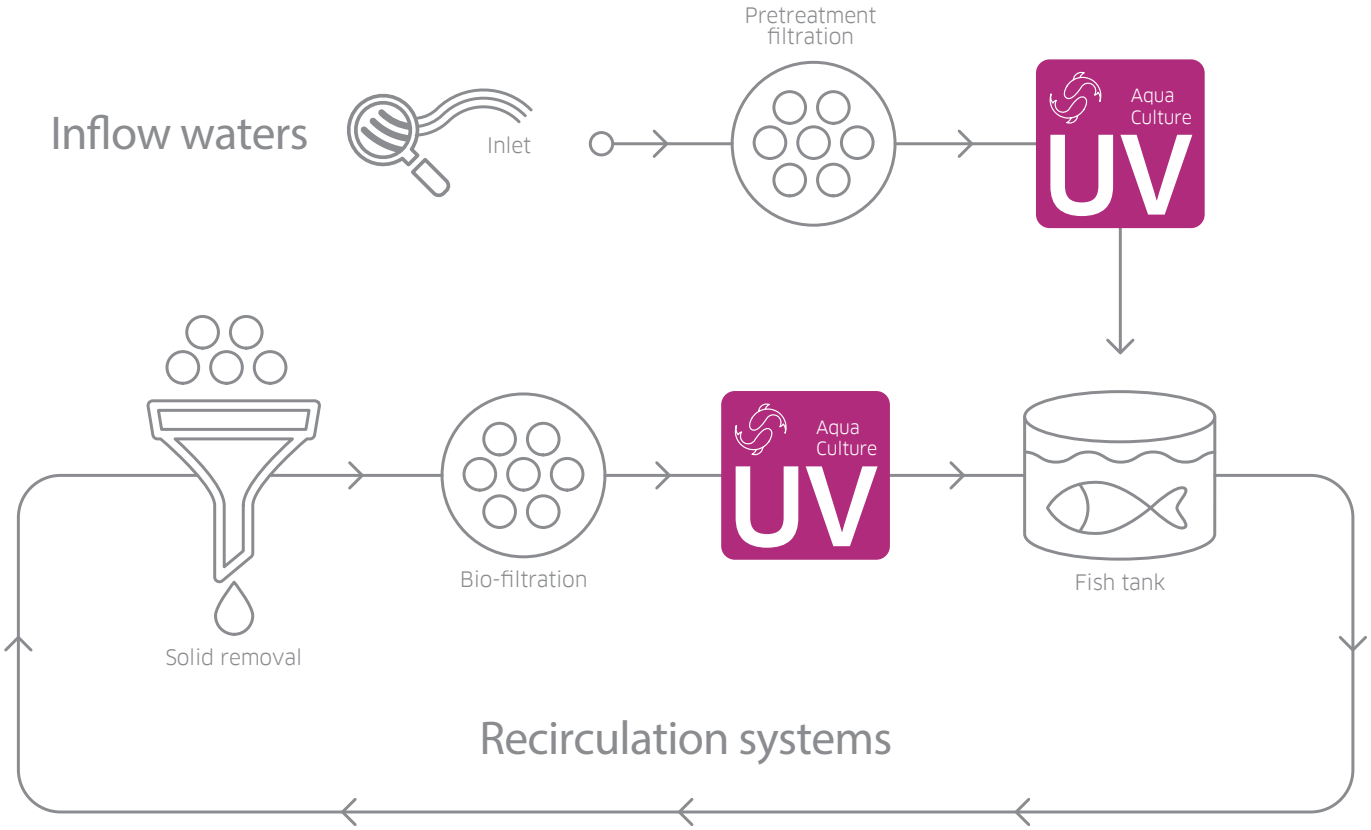
UV TREATMENT FOR AQUACULTURE

Our **RASLine D PH** systems are aimed specifically at providing UV treatment for product and process waters used in the aquaculture industry.

By using a UV system you will deactivate harmful micro-organisms, reduce microbial load, and support bio-fouling control within water systems. Each system comes with a UV monitor to measure the germicidal output of the UV system and make it easy to monitor and log performance.

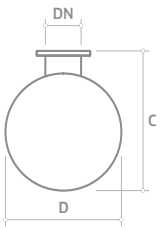
Application Optimised UV for Aquaculture

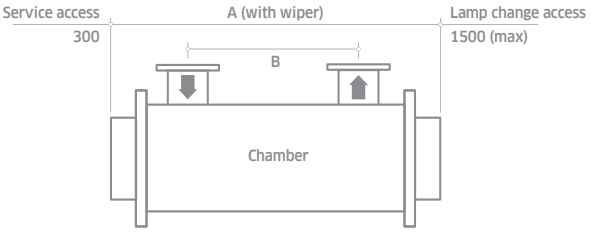
POTENTIAL LOCATIONS OF THE RASLINE D PH™ IN A RECIRCULATING AQUACULTURE SYSTEM (RAS)

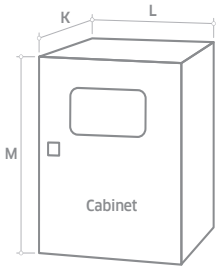


KEY FEATURES	WHAT IT GIVES YOU	BENEFITS FOR YOU
INTELLIGENCE		
UV intensity monitor measuring active wavelengths	Continuous verification of performance with in-built low intensity alarm	Easy to monitor and log system performance
OPTIMISATION		
UV water treatment	Protect your fish, your processes and the environment from contamination	Proven performance
		No chemicals used
Designed for the treatment of aquaculture water	Constructed of 316L stainless Steel wetted parts, also available in Super Duplex construction for sea water applications	Industry compliant materials
	Automatic wiper (quartz cleaning)	Self cleaning
INTEGRATION		
Compact design	Can be fitted to skids	Easy integration
	Can be retrofitted to existing process	

*Option







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.

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
RASLine D PH 0060	1.6	1	85	850	240	320	240	80	330	750	850	40	85
RASLine D PH 0080	2.7	1	91	1300	710	319	240	80	330	750	850	50	85
RASLine D PH 0083	2.7	1	91	1300	710	319	240	100	330	750	850	50	85
RASLine D PH 0095	4.4	1	81	1300	710	319	240	80	330	750	850	50	85
RASLine D PH 0100	4.4	1	81	1300	710	319	240	100	330	750	850	50	85
RASLine D PH 0209	4.4	1	90	1300	660	420	290	150	330	750	850	65	85
RASLine D PH 0240	5.8	1	84	1300	660	420	290	150	330	900	1100	65	85
RASLine D PH 0300	5.8	1	93	1300	610	505	410	200	330	900	1100	140	165
RASLine D PH 0400	16.5	4	62	1300	660	420	290	150	330	1100	1600	65	282
RASLine D PH 0530	7.4	4	90	1300	550	505	410	250	330	1100	1100	140	165
RASLine D PH 0550	16.5	4	62	1300	610	505	410	200	330	1100	1600	140	282
RASLine D PH 0900***	25.2	6	62	1300	550	505	410	250	330	900	1100	140	165
									330	1100	1600		282
RASLine D PH 0950***	33	8	62	1300	550	505	410	250	330	1100	1600	140	282
									330	1100	1600		282
RASLine D PH 0970***	33	8	76	1300	500	505	430	300	330	1100	1600	160	282
									330	1100	1600		282

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:	BSPT or NPT if ANSI flange
End plate:	Removable end plate
Degree of protection:	IP65 equivalent to NEMA 4 but not for outside use
Wiper:	Automatic (electrically driven)
Arc tube (lamp):	Medium pressure
Arc tube enclosure:	Pure quartz (F200)
Expected lamp life:	8,000 hrs
Temperature sensor:	Yes
UV monitor:	Wet UV monitor (if above minimum T10)
Working fluid temperature:	1˚C to 60˚C
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
Flange options: ANSI 150, JIS, Table ‘E’
Lead length: 20 m, 30 m or 50 m cabinet to chamber
Welder Document Pack for chamber construction
Bleed valve: BSPT or NPT if ANSI flange
Skid mounting (not shipboard or earthquake zone)
Operating pressure: 10 bar

OPTIONS (CONTINUED)

Power adjustment: 4 level power switching
Air vent connection: BSPT blanked off or NPT if ANSI flange
Stainless steel cabinet with air to air heat exchangers 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 D PH 0400 - 0970)
Water leak detection: Detects water leaks from quartz sleeve (except D PH 0400 - 0970)
Halogen-free cables
Arc tube enclosure: Doped quartz F240 (reduces performance)

CABINET (CONTROLLER PHOTON)

Material:	Polyester coated carbon steel
Degree of protection:	IP54 NEMA 12
Supply voltages:	D PH 0070-0083 95 V to 260 V (+/- 10%) D PH 0100-0300 190 V to 480 V (+/- 10%) D PH 0350-0950 380 V to 480 V (+/- 10%) 50/60 Hz
Operating temperature range:	5˚C to 40˚C
Relative humidity:	<85% non-condensing
Cooling fans:	Yes
Interconnecting cable:	10 m cabinet to chamber

CUSTOMER OUTPUTS

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

CUSTOMER INPUTS

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

CUSTOMER COMMUNICATIONS PORT

None

APPROVALS

CE marked, UL listed E149108

RASLine D PH

Also available in our Aquaculture product range...

RASLINE D EO

Energy Optimised general water treatment

RASLINE PQ IL

3rd party NVI validated systems for critical treatment applications

Canada
+1 980 256 5700
americas@nuvonic.com

China
+86 21 6167 9599
apac@nuvonic.cn

Germany
+49 2268 90 8300
germany@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

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