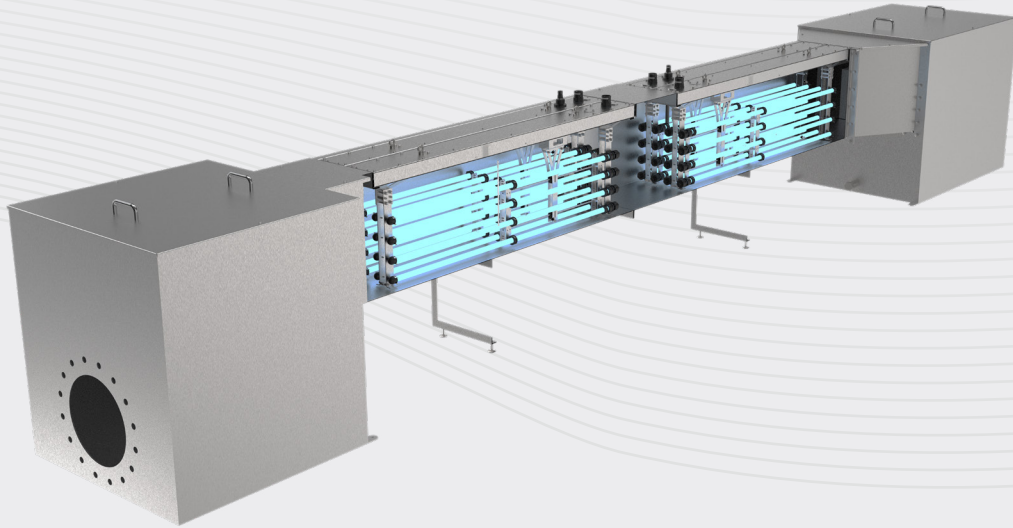




AUVONIC

formerly Aquionics, Berson, Hanovia and Orca GmbH



OPENLINE

OPEN CHANNEL UV TREATMENT FOR WASTEWATER, REUSE AND INDUSTRIAL APPLICATIONS

OpenLine UV systems provide an economical and efficient solution for the treatment of wastewater effluent. Using low pressure, high-output amalgam lamps, the OpenLine delivers a sustainable design while not compromising on quality or performance.

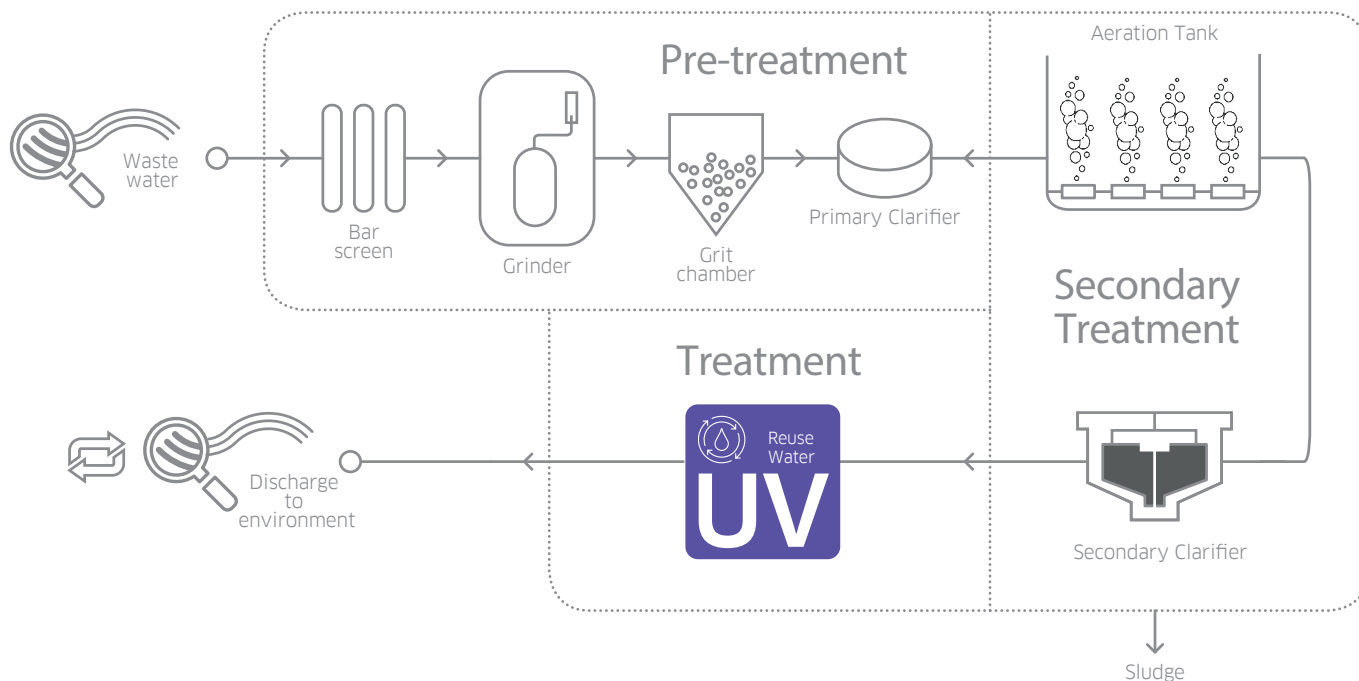
The OpenLine advanced control system monitors lamp output, water quality and flow, thus only consuming the necessary power to achieve the required performance. Based on over 100 years of UV system experience.

The OpenLine is ideal for small to medium sized treatment plants that are looking for a low maintenance and easy to operate system.

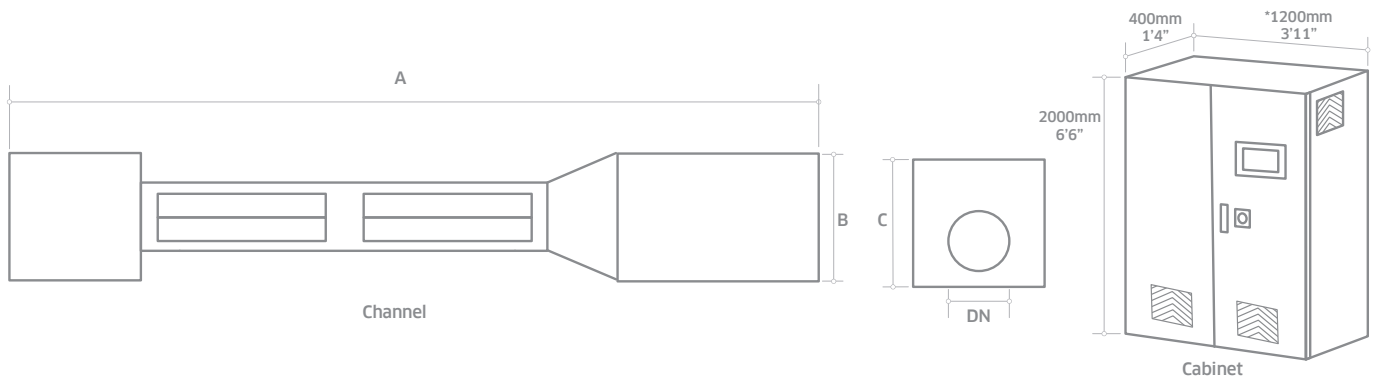


Application
Optimised UV for
Open Channel

POTENTIAL LOCATIONS OF THE OPENLINE IN MUNICIPAL WATER TREATMENT PROCESS



KEY FEATURES	WHAT IT GIVES YOU	BENEFITS FOR YOU
INTELLIGENCE		
Calibrated UV sensor measuring active wavelengths	Continuous verification of performance with real time UV intensity reading and in-built low UV dose alarm	Easy to monitor and log system performance
Flow and UV transmittance (UVT) meter inputs	Dose reading based on actual process conditions when meters are connected	Accurate UV dose reading guaranteed under wide range of operating conditions
OPTIMISATION		
Advanced control system with lamp/ballast turn down capability	Reduced power consumption	Confidence in a sustainable solution with minimal carbon footprint
UV dose for wastewater treatment	Treatment for wastewater from microbiological contamination	No chemical storage or delivery
Robust Design	Parts have been selected for the rigors of wastewater effluent	Reduced downtime due to maintenance
	Standard flange hole patterns	Easily connect standard flanges
Automatic wiper (quartz cleaning)	Automatically cleans to maintain performance	Provides uninterrupted system performance
INTEGRATION		
Compact Design	Configurable stainless steel channel	Easy to install
	Can be retrofitted to existing process	
RS 485 interface	Cable connection to customer control system	Easy integration to SCADA or plant control systems



MODEL NUMBER	NO. OF LAMPS	NO. OF MODULES	NO OF BANKS	NO. OF CABINETS	CHANNEL SIZE MM [FT,IN]			I/O HOLE PATTERN	MAX CURRENT DRAW	
					A	B	C		DN	Fan ventilated /A Voltage dependent
OLS 02021	4	1	1	1	3962 [13']	660 [2'2"]	1160 [3'9.7"]	DN200 EN1092-1 8" ANSI B16.5 150Lbs	6.1 - 6.7	7.2 - 8.1
OLS 03021	6	1	1	1	4191 [13'9"]	660 [2'2"]	1160 [3'9.7"]	DN250 EN1092-1 10" ANSI B16.5 150Lbs	6.1 - 6.7	7.2 - 8.1
OLS 04021	8	1	1	1	4445 [14'7"]	660 [2'2"]	1160 [3'9.7"]	DN300 EN1092-1 12" ANSI B16.5 150Lbs	8.6 - 9.8	9.6 - 11.2
OLS 03041	12	2	1	1	4928 [16'2"]	1060 [3' 5.7"]	1160 [3'9.7"]	DN350 EN1092-1 14" ANSI B16.5 150Lbs	8.6 - 9.8	9.6 - 11.2
OLS 04041	16	2	1	1	5334 [17'6"]	1060 [3' 5.7"]	1160 [3'9.7"]	DN400 EN1092-1 16" ANSI B16.5 150Lbs	11.0 - 12.9	12.1 - 14.2
OLS 02022	8	2	2	1	6350 [20'10"]	660 [2'2"]	1160 [3'9.7"]	DN200 EN1092-1 8" ANSI B16.5 150Lbs	8.6 - 9.8	9.6 - 11.2
OLS 03022	12	2	2	1	6604 [21'8"]	660 [2'2"]	1160 [3'9.7"]	DN250 EN1092-1 10" ANSI B16.5 150Lbs	8.6 - 9.8	9.6 - 11.2
OLS 04022	16	2	2	1	6756 [22'2"]	660 [2'2"]	1160 [3'9.7"]	DN300 EN1092-1 12" ANSI B16.5 150Lbs	11.0 - 12.9	12.1 - 14.2
OLS 03042	24	4	2	1	7315 [24']	1060 [3' 5.7"]	1160 [3'9.7"]	DN350 EN1092-1 14" ANSI B16.5 150Lbs	13.4 - 15.9	14.5 - 17.3
OLS 04042	32	4	2	1	7747 [25'5"]	1060 [3' 5.7"]	1160 [3'9.7"]	DN400 EN1092-1 16" ANSI B16.5 150Lbs	18.3 - 22.1	19.4 - 23.4

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. * For Cabinet size with air-condition, W becomes 1556 [5'2"], all other sizes remains the same.

UV SYSTEM

Lamp Type:	Amalgam
Input Power per lamp:	330 W
Lamp Configuration:	Horizontal, parallel to flow
Level Control Device Options:	Fixed Finger Weir
Sleeve Cleaning Method:	Automatic Pneumatic Drive Wiping System
UV Module Connection:	IP66 / NEMA 4X
Maximum Particle Size:	< 30 microns
Banks per channel:	2 Maximum
Modules per bank:	Configurable
Lamp Operating Lifetime:	14,000 Hours

OPTIONS

NEMA 4X Cabinet (SS304) Upgrade (outdoors) w. air conditioners
Ambient Operating Temperature: 41-122°F (5-40°C) (Outdoor)
Cabinet Enclosure Rating IP65/NEMA 4 (Outdoor)
Compressor for pneumatic wiping system
UV Connect
Uninterruptible Power Supply (UPS)

HMI / CONTROL

Display:	Allan Bradley Panelview 800 10.4" operator Interface Touch Screen
Fault Finding:	Alarm Notifications, Lamp Status
PLC:	Allan Bradley Micro850

POWER AND CONTROL CABINET

Power Supply/V:	380V (3L+N wye) 50/60 Hz 400V (3L+N wye) 50/60 Hz 415V (3L+N wye) 50/60 Hz 480V (3L+N wye) 50/60 Hz
Lamp Driver Type:	Electronic, variable output
Cabinet Enclosure Rating:	IP54/NEMA 12 (Indoor)
Ballast Cooling Method:	Forced fan cooling
Ambient Operating Temperature:	41-104°F (5-40°C) (Indoor)
Maximum Ambient Relative Humidity:	85% non-condensing
Typical Outputs Provided:	Lamp status, common alarms, warnings, & UV intensity (dose)
Cabinet Material:	Painted Carbon Steel (Indoor)

CUSTOMER OUTPUTS

4-20 mA outputs:	UV dose bank A, UV dose bank B
VFC outputs:	Bank A running, humidity, trip, low-UV Bank B running, humidity, trip, low-UV

CUSTOMER INPUTS

4-20 mA active or passive inputs:	Optimal Flow Signal, Optional UV Transmittance Signal
24VDC inputs:	Remote stop/start, remote reset

CUSTOMER COMMUNICATIONS PORT

Modbus RS 485 serial RTU, Ethernet

APPROVALS

CE marked, UL508A



OPENLINE

Also available in our Waste Water product range...



**PROLINE
PQ WW IL**

Range of medium pressure products with NWRI validation for waste water reuse



**PROLINE
WW IL**

Range of compact medium pressure products for waste water treatment

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