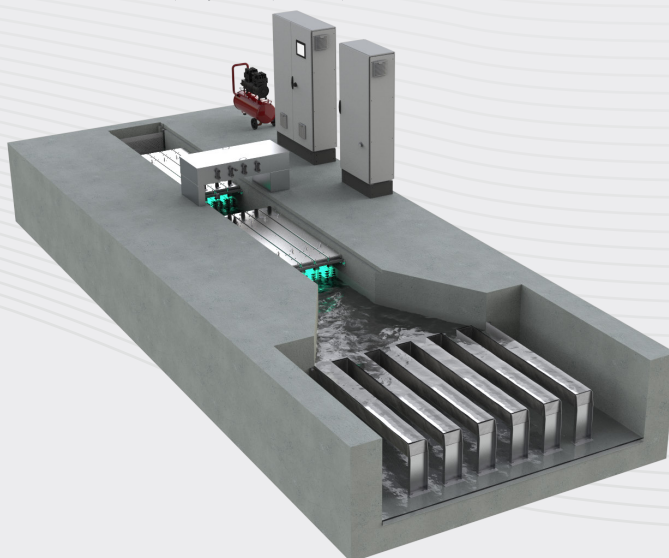




NUVONIC

formerly Aquionics, Berson, Hanovia and Orca GmbH



OPENLINE OLF

OPEN CHANNEL UV TREATMENT FOR WASTEWATER, REUSE AND INDUSTRIAL APPLICATIONS

OpenLine Fixed Finger Weir 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.

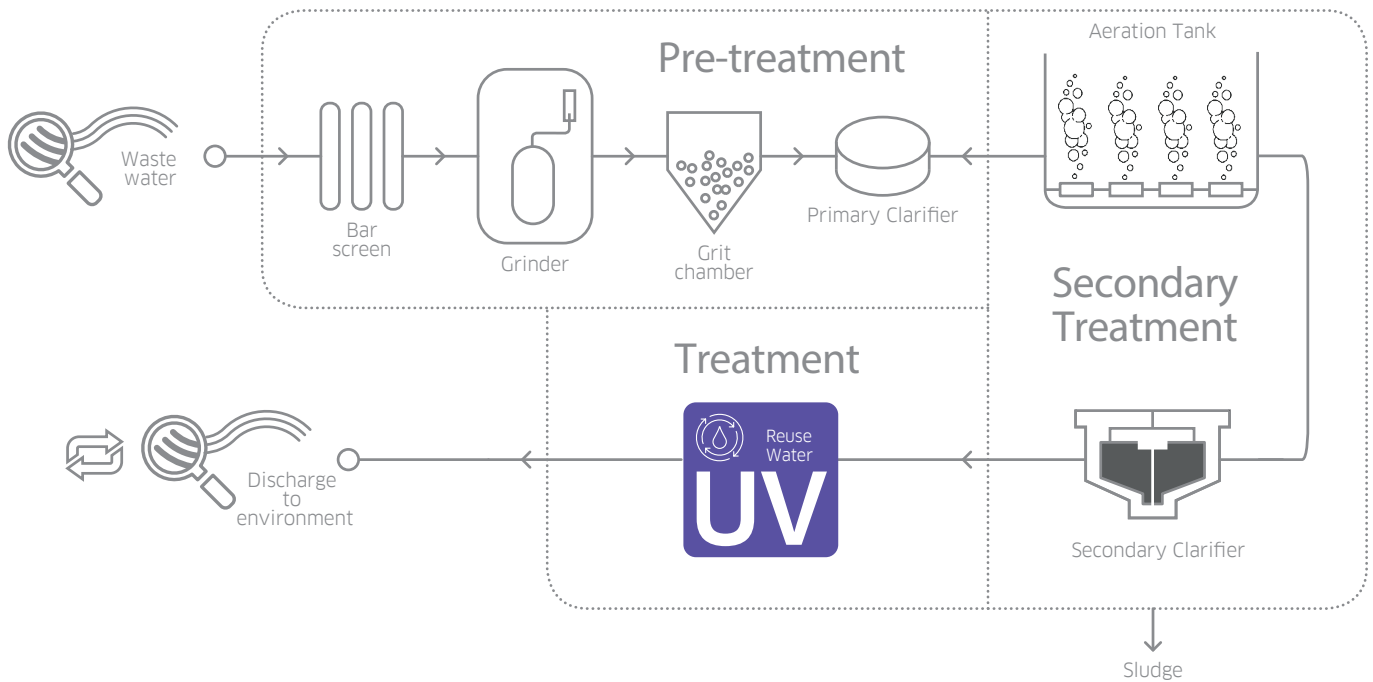
The OpenLine advanced control system monitors lamp output, water quality and flow, thus only consuming the necessary power to achieve the required performance. Based on over 100 years of UV system experience.

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

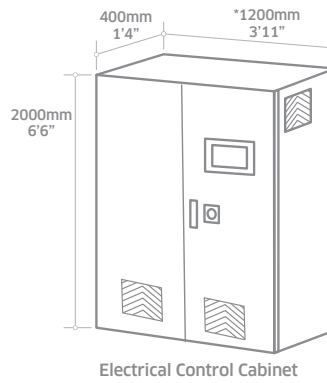
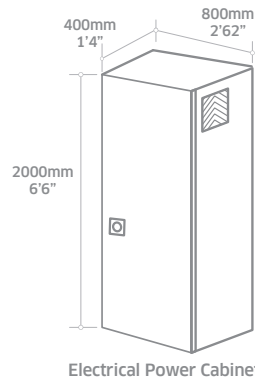


Application
Optimized UV for
Open Channel

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
OPTIMIZATION		
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	Can be retrofitted to existing process and chlorine contact channels	Easy to install
RS 485 interface	Cable connection to customer control system	Easy integration to SCADA or plant control systems



MODEL NUMBER	HYDRAULIC LIMIT		NO. OF LAMPS	NO. OF MODULES	NO OF BANKS	NO. OF CABINETS	MAX CURRENT DRAW	
	m ³ /h	US MGD					Fan ventilated /A Voltage dependent	Air conditioned /A Voltage dependent
OLF-02021	84	0.53	4	1	1	1	6.1 - 6.7	7.2 - 8.1
OLF-03021	129	0.82	6	1	1	1	6.1 - 6.7	7.2 - 8.1
OLF-04021	174	1.10	8	1	1	1	8.6 - 9.8	9.6 - 11.2
OLF-03041	266	1.68	12	2	1	1	8.6 - 9.8	9.6 - 11.2
OLF-04041	358	2.27	16	2	1	1	11.0 - 12.9	12.1 - 14.2
OLF-04061	542	3.44	24	3	1	1	13.4 - 15.9	14.5 - 17.3
OLF-04081	726	4.60	32	4	1	1	18.3 - 22.1	19.4 - 23.4
OLF-02022	84	0.53	8	2	2	1	8.6 - 9.8	9.6 - 11.2
OLF-03022	129	0.82	12	2	2	1	8.6 - 9.8	9.6 - 11.2
OLF-04022	174	1.10	16	2	2	1	11.0 - 12.9	12.1 - 14.2
OLF-03042	266	1.68	24	4	2	1	13.4 - 15.9	14.5 - 17.3
OLF-04042	358	2.27	32	4	2	1	18.3 - 22.1	19.4 - 23.4
OLF-04062	542	3.44	48	6	2	2	13.4 - 15.9	14.5 - 17.3
OLF-04082	726	4.60	64	8	2	2	18.3 - 22.1	19.4 - 23.4

All dimensions are available on request 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 conditioning, W becomes 1556mm [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
Submerged components Material:	Stainless Steel 316(EN 1.4404)
Non-submerged components Material:	Stainless Steel 304 (EN 1.4401)
Safety:	Snap Action Limit Switch (System shut down when module is removed)

OPTIONS	
Painted Carbon Steel Cabinet (Indoor), IP55/NEMA 12, with Forced Fan cooling Compressor for pneumatic wiping system	
UV Connect	
Uninterruptible Power Supply (UPS)	
A-Frame module lifting device	
UVT meter	
Spare Module	
Module Storage/Maintenance Rack	

HMI / CONTROL	
Display:	Allen Bradley Panelview 800 10.4" operator Interface Touch Screen
Fault Finding:	Alarm Notifications, Lamp Status
PLC:	Allen 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:	IP65/NEMA 4 (Outdoor)
Ballast Cooling Method:	Air conditioned cooling
Ambient Operating Temperature:	41-104°F (5-40°C)
Maximum Ambient Relative Humidity:	85% non-condensing
Typical Outputs Provided:	Lamp status, common alarms, warnings, & UV intensity (dose)
Cabinet Material:	Stainless Steel (SS304) Outdoors

CUSTOMER OUTPUTS	
4-20 mA outputs:	UV dose bank A, UV dose bank B
VFC outputs:	Bank A running, any warning, any trip Bank B running, any warning, any trip Channel 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	
Ethernet IP, Modbus TCP/IP (SCADA connection)	

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

Canada

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americas@nuvonicuv.com

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apac@nuvonicuv.com

Germany

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