

## OPENLINE OLS

### *OPEN CHANNEL UV TREATMENT FOR WASTEWATER, REUSE*

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.

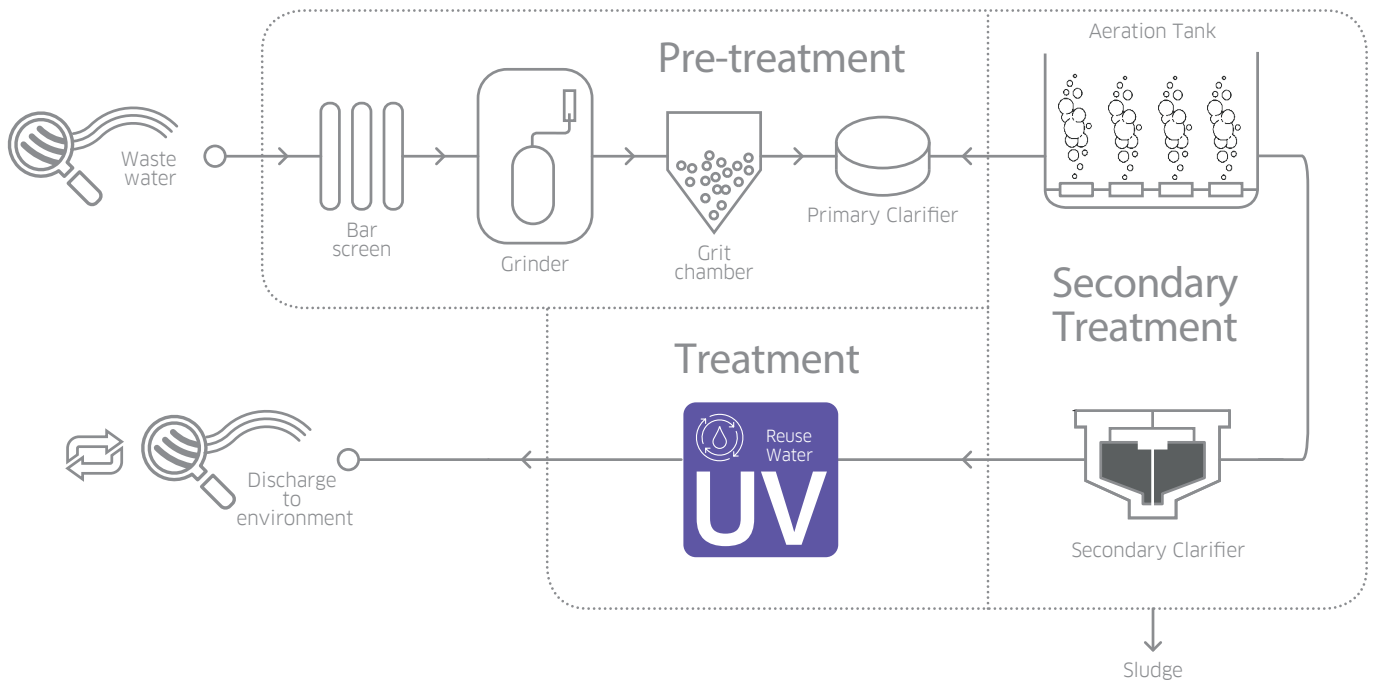
The OpenLine advanced control system monitors lamp output, water quality and flow, thus only consuming the necessary power to achieve the required performance. Based on over 100 years of UV system experience.

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

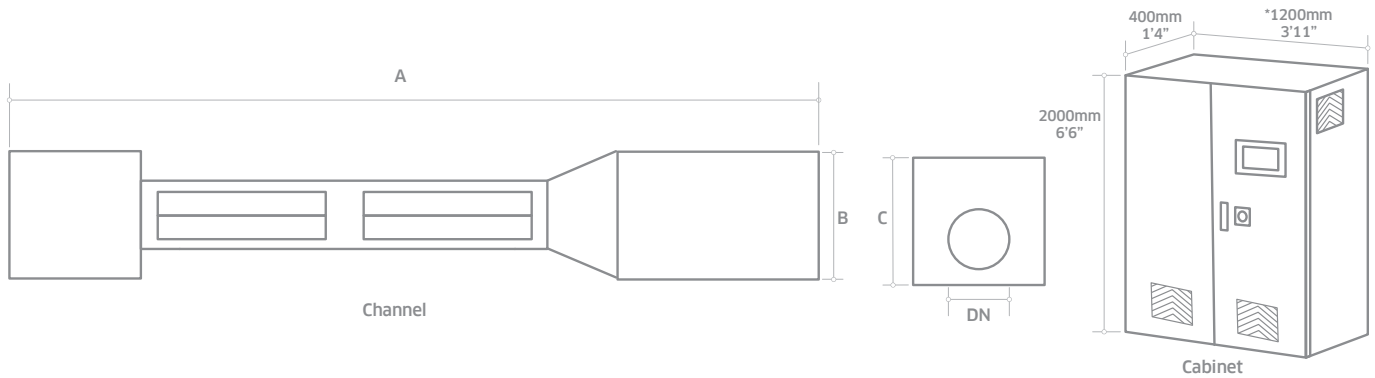


Application  
Optimized UV for  
Open Channel

# POTENTIAL LOCATIONS OF THE OPENLINE IN MUNICIPAL WATER TREATMENT PROCESS



KEY FEATURES	WHAT IT GIVES YOU	BENEFITS FOR YOU
<b>INTELLIGENCE</b>		
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
<b>OPTIMIZATION</b>		
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
<b>INTEGRATION</b>		
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	HYDRAULIC LIMIT m <sup>3</sup> /h	NO. OF LAMPS	NO. OF MODULES PER BANK	NO OF BANKS	NO. OF CABINETS	CHANNEL SIZE mm [ft, inch]			I/O HOLE PATTERN DN	MAX ELECTRICAL POWER DRAW PER CABINET (kW) <small>*ENQUIRE WITH SALES FOR MORE INFORMATION</small>	
						A	B	C		Fan ventilated	Air conditioned
OLS-02021	84	4	1	1	1	3962 [13']	660 [2'2"]	1160 [3'9.7"]	DN200 EN1092-1 [8" ANSI B16.5 150Lbs]	1.6	2.5
OLS-03021	129	6	1	1	1	4191 [13'9"]	660 [2'2"]	1160 [3'9.7"]	DN250 EN1092-1 [10" ANSI B16.5 150Lbs]	2.3	3.1
OLS-04021	174	8	1	1	1	4445 [14'7"]	660 [2'2"]	1160 [3'9.7"]	DN300 EN1092-1 [12" ANSI B16.5 150Lbs]	3	3.8
OLS-03041	266	12	2	1	1	4928 [16'2"]	1060 [3'5.7"]	1160 [3'9.7"]	DN350 EN1092-1 [14" ANSI B16.5 150Lbs]	4.3	5.1
OLS-04041	358	16	2	1	1	5334 [17'6"]	1060 [3'5.7"]	1160 [3'9.7"]	DN400 EN1092-1 [16" ANSI B16.5 150Lbs]	5.6	6.5
OLS-02022	84	8	1	2	1	6350 [20'10"]	660 [2'2"]	1160 [3'9.7"]	DN200 EN1092-1 [8" ANSI B16.5 150Lbs]	2.9	3.8
OLS-03022	129	12	1	2	1	6604 [21'8"]	660 [2'2"]	1160 [3'9.7"]	DN250 EN1092-1 [10" ANSI B16.5 150Lbs]	4.3	5.1
OLS-04022	174	16	1	2	1	6756 [22'2"]	660 [2'2"]	1160 [3'9.7"]	DN300 EN1092-1 [12" ANSI B16.5 150Lbs]	5.6	6.5
OLS-03042	266	24	2	2	1	7315 [24']	1060 [3'5.7"]	1160 [3'9.7"]	DN350 EN1092-1 [14" ANSI B16.5 150Lbs]	8.3	9.2
OLS-04042	358	32	2	2	1	7747 [25'5"]	1060 [3'5.7"]	1160 [3'9.7"]	DN400 EN1092-1 [16" ANSI B16.5 150Lbs]	11	11.9

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-conditioning, W becomes 5'2" [1556], 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:	NEMA 4X / IP66
Maximum Particle Size:	< 30 microns
Lamp Operating Lifetime:	14,000 hours
Submerged components material:	Stainless steel 316L (EN 1.14404)
Non-submerged components material:	Stainless Steel 304L (EN 1.4401)
Safety:	Snap Action Limit Switch (System shut down when module is removed)

#### OPTIONS

304SS Cabinet Upgrade Outdoors, NEMA 4X / IP65 w Air Conditioning
Compressor for pneumatic wiping system
Uninterruptible Power Supply (30 minutes UPS for PLC only)
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:	NEMA 12 / IP54 (Indoor)
Ballast Cooling Method:	Forced fan cooling
Ambient Operating Temperature:	5-40°C (41-104°F) (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, 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

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# NUVONIC

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