



HOD™ Technology

Not Your Conventional UV System



RELIABILITY



CONFIDENCE



PERFORMANCE

Our Promise

Smart effective solutions guaranteed to work for you.

Water disinfection today is not what it ought to be:

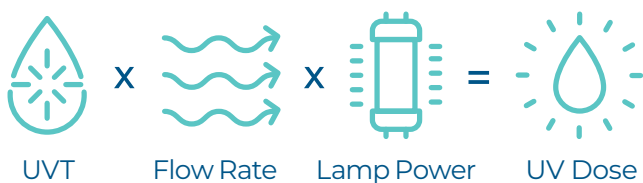
Chemical-based disinfection processes that are only partially effective. Constant calculations and the occasional guess work. We all deserve better.

Atlantium's approach to disinfection technology and design takes conventional processes to new heights, delivering safe water results that speak for themselves.

Real-Time Monitoring & Response to Changing Water Conditions

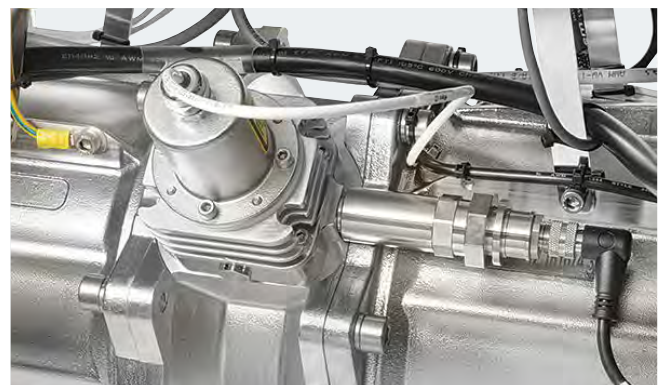
**The UV Dose depends on three parameters:
UVT, flow rate, lamp power.**

Direct and accurate monitoring of each of these parameters individually is crucial for reliable and accurate UV Dose delivery.



Accurate Lamp Performance Monitoring

- Dedicated lamp output sensor per lamp provides monitoring of each individual lamp's performance
- Ensures delivery of the required UV dose at all times
- Continuous adjustment of lamp power according to changing production variables such as flow rate and water UVT



Integrated Water Quality Monitoring

- Integrated UV transmittance (UVT) sensor on each HOD™ system
- Continuously monitors UVT
- Optimizes system performance for actual, not estimated, UVT levels



Real-Time Performance Data

- The most advanced operation module in the market
- User-based authorization management system
- Elaborate information about each individual lamp
- Complete integration with control SCADA system
- Configure output signals, operation modes and alarms



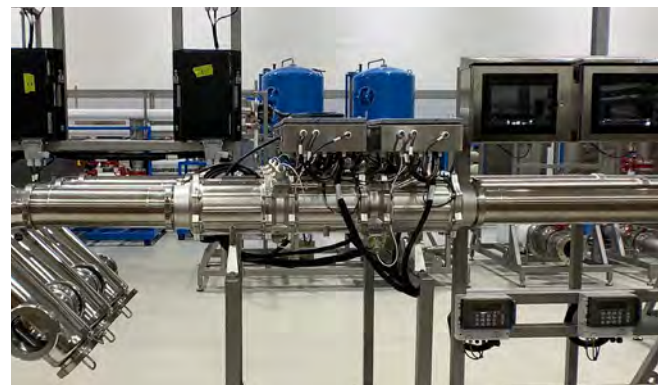
Medium Pressure Lamps

The advantage of the wide germicidal wavelength

The spectral sensitivity of microorganisms to wavelengths between 200-400nm is by now an established fact. Low pressure 254nm is too weak and unreliable to provide the required inactivation. Medium pressure lamps emit a broad germicidal spectrum providing complete protection against a wide variety of microorganisms while using minimal amount of lamps.

Why low amount of lamps is so important?

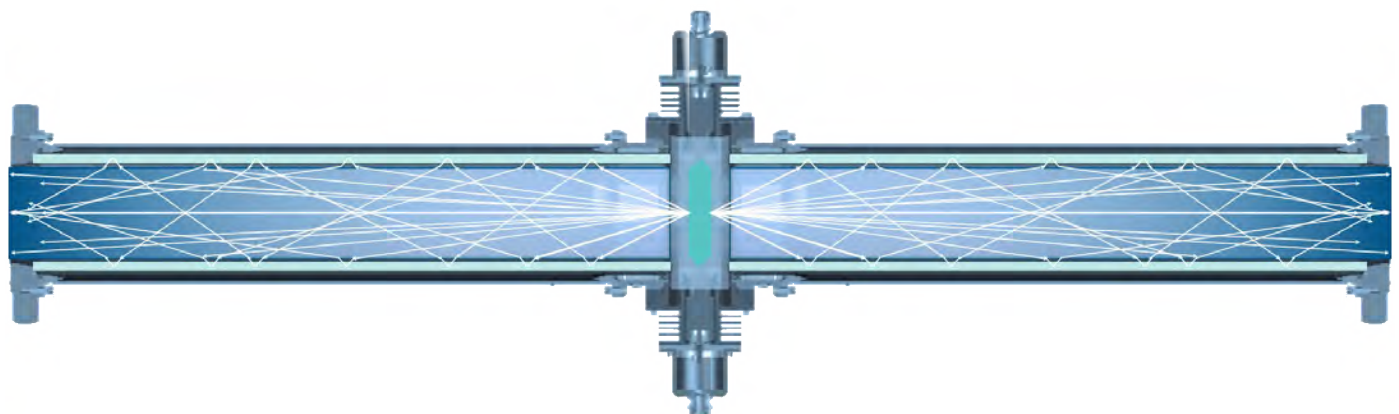
- Accurate monitoring (enables a sensor per lamp)
- Reduced maintenance



Superior Power Efficiency

Total Internal Reflection (TIR) uses fiber-optic principles of recycling UV photons in the disinfection chamber to achieve higher UV dose levels with minimum kW consumption.

- Recycles UV light energy using Total Internal Reflection (TIR)
- Offers most advanced system geometry with optimized hydraulic and optics
- Ensures homogenous UV dose distribution



No Quartz Sleeve Replacement

The HOD™ systems use a high grade silica quartz sleeve five times thicker than those used in conventional UV systems, and does not require periodical replacement.



HOD™ quartz sleeve (left) vs. conventional UV sleeve: due to the robustness and durability of the HOD™ sleeve no periodical replacement is needed

Quick and Easy Lamp Replacement

Lamp replacement does not require draining the system or depressurization and can be safely performed during system operation!

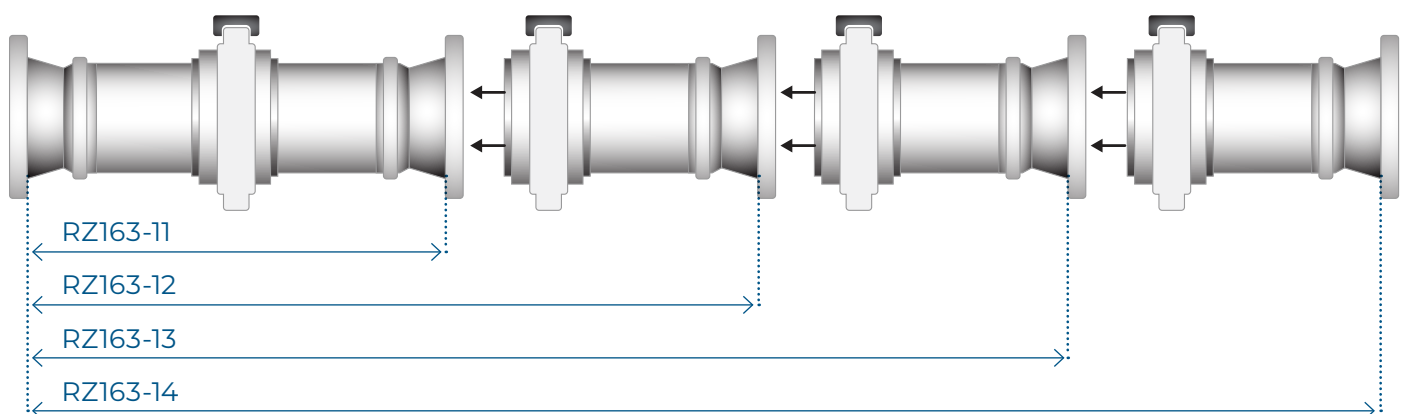


Modular Design Enables Maximum Flexibility

HOD™ systems' core "building blocks" include a lamp and pipe section and independent ballast unit. Sections are added together according to the application and desired UV dose. Each section can operate independently from the rest of the sections.

This unique configuration allows for maximum flexibility in sizing, maintenance and operation:

- Overcomes space and head-loss limitations
- Allows for lamp replacement while system is in operation
- Increase capacity by adding more sections; no need to replace entire system



Specifications



RS104

HOD™ UV System

RS104

Number of lamps	1
Unit Length (mm/inch)	287 / 11.3
Unit chamber width at widest point (mm/inch)	405 / 16
Unit weight (Empty) (kg/lb.)	22.4 / 49.4
Unit volume (liter/gallon)	2.3 / 0.52
Standard pipe connection options	Flange DIN2527 DN100 PN16 / Flange ANSI B 16.5 4" 150 lb. / Ferrule DIN32676 DN100
Maximum water temperature – lamps on (°C / °F)	60° / 140°
Maximum water temperature – lamps off (°C / °F)	90° / 194°
Maximum ambient temperature (°C / °F)	45° / 113°
Maximum working pressure (bar/PSI)	10 / 145
Lamp sleeve material	High grade fused silica (quartz)
Housing material	Electro-polished stainless steel 316 / Super Duplex
Controller	Flat touch-screen user interface
Power supply enclosure	Electrical Cabinet
Enclosure protection rating	IP54 / Type 4X
Electricity requirements	200* / 380 / 400 / 440 / 480 / 600* VAC 3 phases 50/60 Hz

*Transformer required

Specifications subjected to change without notice.

All dimensions and weights for reference only; ICD drawing should be used for design purposes.



RZ104 SERIES

HOD™ UV System

RZ104-11

RZ104-12

Number of lamps

1

2

Unit length (mm/inch)

1039 / 41

1565 / 62

Unit chamber width at widest
point (mm/inch)

405 / 16

364 / 14.33

Unit weight (kg/lb.)

37 / 82

58 / 128

Unit volume (liter/gallon)

9 / 2.3

13 / 3.5

All Models

Standard pipe
connection options

Flange DIN2527 DN100 PN16 / Flange ANSI B 16.5 4" 150 lb. / Ferrule DIN32676 DN100

Maximum water temperature –
lamps on (°C / °F)

60° / 140°

Maximum water temperature –
lamps off (°C / °F)

90° / 194°

Maximum ambient
temperature (°C / °F)

45° / 113°

Maximum working pressure
(bar/PSI)

10 / 145

Lamp sleeve material

High grade fused silica (quartz)

Housing material

Electro-polished stainless steel 316 / Super duplex

Controller

Flat touch-screen user interface integrated with remote monitoring & control

Power supply enclosure

Ballast module

Enclosure protection
rating

IP54 / IP56

Electricity requirements

200* / 380 / 400 / 440 / 480 / 600* VAC 3 phases 50/60 Hz

*Transformer required

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RZ163 SERIES (Including HP & UHP models)

HOD™ UV System

	RZ163-11	RZ163-12	RZ163-13	RZ163-14
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Number of MPHI lamps	1	2	3	4
Unit length (mm/inch)	822 / 32.4	1175 / 46	1527 / 60.12	1800 / 74
Unit chamber width at widest point (mm/inch)	363 / 14.3	363 / 14.3	363 / 14.3	363 / 14.3
Unit weight (kg/lb.)	62 / 136.6	92 / 203	125 / 276	150 / 331
Unit volume (liter/gallon)	17.5 / 4.6	25 / 6.6	35 / 9.2	40 / 10.6

All Models

Standard pipe connection options	Flange DIN2576 DN150 PN 16 / Flange ANSI B 16.5 6" 150 lb. / Ferrule 6" ASME BPE/3A
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Maximum water temperature – lamps on (°C / °F)	60° / 140°
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Maximum water temperature – lamps off (°C / °F)	90° / 194°
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Maximum ambient temperature (°C / °F)	45° / 113°
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Maximum working pressure (bar/PSI)	10 / 145
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Lamp sleeve material	High grade fused silica (quartz)
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Housing material	Electro-polished stainless steel 316 / Super duplex
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Controller	Flat touch-screen user interface integrated with remote monitoring & control
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Power supply enclosure	Ballast module
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Enclosure protection rating	IP54 / IP56
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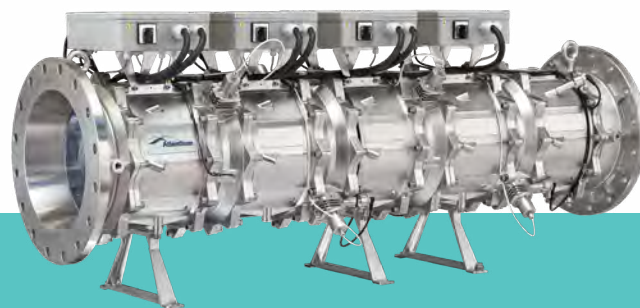
Electricity requirements	200* / 380 / 400 / 440 / 480 / 600* VAC 3 phases 50/60 Hz
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Automatic Deposit Prevention Mechanism (DPM)	Optional
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*Transformer required

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RZ300 SERIES

HOD™ UV System

RZ300-11

RZ300-12

RZ300-13

RZ300-14

Number of lamps

1

2

3

4

Unit length (mm/inch)

782 / 30.8

1100 / 43.3

1418 / 55.8

1736 / 68.3

Unit chamber width at
widest point (mm/inch)

505 / 20

505 / 20

505 / 20

505 / 20

Unit weight (kg/lb.)

140 / 308.6

184 / 405.6

228 / 502.6

249 / 549

Unit volume (liter/gallon)

60 / 15.8

83 / 22

105 / 27.7

127 / 33.5

All Models

Standard pipe
connection options

Flange DIN2576 DN350 / Flange DIN2576 DN250 / Flange ANSI 14" 150 lb. / Flange ANSI 10" 150 lb.

Maximum water temperature –
lamps on (°C / °F)

60° / 140°

Maximum water temperature –
lamps off (°C / °F)

90° / 194°

Maximum ambient
temperature (°C / °F)

45° / 113°

Maximum working pressure
(bar/PSI)

7 / 102

Lamp sleeve material

High grade fused silica (quartz)

Housing material

Electro-polished stainless steel 316 / Super duplex

Controller

Flat touch-screen user interface integrated with remote monitoring & control

Power supply enclosure

Ballast module

Enclosure protection rating

IP54 / IP56

Electricity requirements

200* / 380 / 400 / 440 / 480 / 600* VAC 3 phases 50/60 Hz

Automatic Deposit Prevention
Mechanism (DPM)

Optional

*Transformer required

Specifications subjected to change without notice.

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RZB300 SERIES

HOD™ UV System	RZB300-11	RZB300-12	RZB300-13	RZB300-14	RZB300-15
Number of lamps	2	4	6	8	10
Unit length (mm/inch)	837 / 32.95	1210 / 47.64	1583 / 62.33	1956 / 77	2329 / 91.7
Unit chamber length width at widest point (mm/inch)	505 / 20	505 / 20	505 / 20	505 / 20	505 / 20
Unit weight (kg/lb.)	154 / 399.5	216 / 476.2	277 / 610.9	340 / 749.50	403 / 888.4
Unit volume (liter/gallon)	60 / 15.9	83 / 21.9	105 / 27.7	127 / 33.5	149 / 39.4

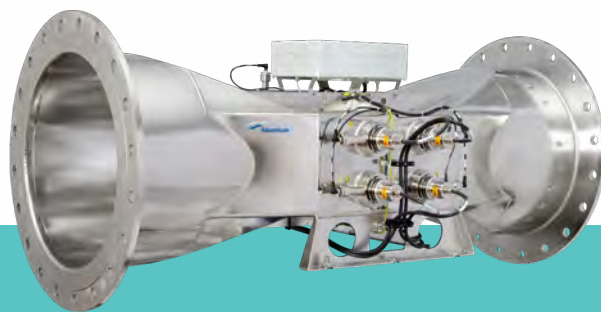
All Models

Standard pipe connection options	Flange DIN2576 DN350 / Flange DIN2576 DN250 / Flange ANSI 14" 150 lb. / Flange ANSI 10" 150 lb.
Maximum water temperature – lamps on (°C / °F)	60° / 140°
Maximum water temperature – lamps off (°C / °F)	90° / 194°
Maximum ambient temperature (°C / °F)	45° / 113°
Maximum working pressure (bar/PSI)	7 / 102
Lamp sleeve material	High grade fused silica (quartz)
Housing material	Electro-polished stainless steel 316 / Super duplex
Controller	Flat touch-screen user interface integrated with remote monitoring & control
Power supply enclosure	Ballast module
Enclosure protection rating	IP54 / IP56
Electricity requirements	200* / 380 / 400 / 440 / 480 / 600* VAC 3 phases 50/60 Hz
Automatic Deposit Prevention Mechanism (DPM)	Optional

*Transformer required

Specifications subjected to change without notice.

All dimensions and weights for reference only; ICD drawing should be used for design purposes.



EP600 SERIES

HOD™ UV System

EP600-2

EP600-4

Number of lamps

2

4

All Models

Unit length (mm/inch)

1800 / 70.87

Unit chamber width at widest point (mm/inch)

1062 / 42

Unit weight (kg/lb.)

280 / 618

Unit volume (liter/gallon)

430 / 114

Standard pipe connection options

Flange DIN2633 DN600

Maximum water temperature – lamps on (°C / °F)

60° / 140°

Maximum water temperature – lamps off (°C / °F)

90° / 194°

Maximum ambient temperature (°C / °F)

45° / 113°

Maximum working pressure (bar/PSI)

2 / 29

Lamp sleeve material

High grade fused silica (quartz)

Housing material

Electro-polished stainless steel 316L

Controller

Flat touch-screen user interface integrated with remote monitoring & control

Power supply enclosure

Electrical cabinet

Enclosure protection rating

IP54

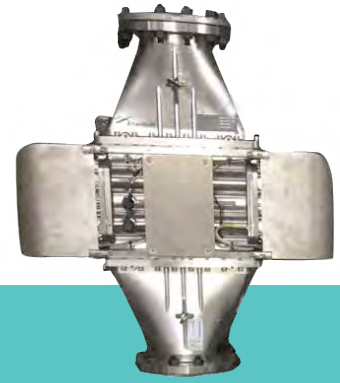
Electricity requirements

200* / 380 / 400 / 440 / 480 / 600* VAC 3 phases 50/60 Hz

*Transformer required

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RZM200 SERIES

HOD™ UV System

RZM200-2

RZM200-3

RZM200-5

Number of lamps

2

3

5

All Models

Unit length
(mm/inch)

1040 / 40.9

Unit chamber width at widest
point (mm/inch)

956 / 37.64

Unit weight
(kg/lb.)

177 / 390

Unit volume
(liter/gallon)

38 / 9.77

Standard pipe
connection options

Flange DIN2633 DN200

Maximum water temperature –
lamps on (°C / °F)

60° / 140°

Maximum water temperature –
lamps off (°C / °F)

90° / 194°

Maximum ambient
temperature (°C / °F)

45° / 113°

Maximum working pressure
(bar/PSI)

7 / 102

Lamp sleeve material

High grade fused silica (quartz)

Housing material

Stainless steel 316 / Super duplex

Controller

Flat touch-screen user interface integrated with remote monitoring & control

Power supply enclosure

Electrical cabinet

Enclosure protection rating

IP54

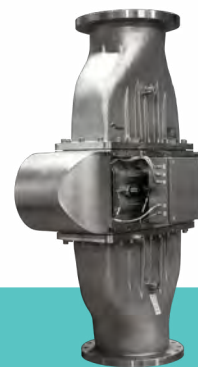
Electricity requirements

200* / 380 / 400 / 440 / 480 / 600* VAC 3 phases 50/60 Hz

*Transformer required

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RZM350 SERIES

HOD™ UV System

RZM350-5

RZM350-8

RZMW350-7

RZMW350-11

Number of lamps

5

8

7

11

Unit length (mm/inch)

1635 / 64.4

1635.2 / 64.4

1635.2 / 64.4

1635.2 / 64.4

Unit chamber width at widest
point (mm/inch)

1293 / 50.9

1293 / 50.9

1390 / 54.7

1390 / 54.7

Unit weight (kg/lb.)

451 / 994

451 / 994

550 / 1213

550 / 1213

Unit volume (liter/gallon)

197 / 52

197 / 52

231 / 61

231 / 61

All Models

Standard pipe
connection options

Flange DIN2576 DN350

Maximum water temperature –
lamps on (°C / °F)

60° / 140°

Maximum water temperature –
lamps off (°C / °F)

90° / 194°

Maximum ambient
temperature (°C / °F)

45° / 113°

Maximum working pressure
(bar/PSI)

7 / 102

Lamp sleeve material

High grade fused silica (quartz)

Housing material

Stainless steel 316L / Super duplex

Controller

Flat touch-screen user interface integrated with remote monitoring & control

Power supply enclosure

Electrical cabinet

Enclosure protection rating

IP54

Electricity requirements

200* / 380 / 400 / 440 / 480 / 600* VAC 3 phases 50/60 Hz

*Transformer required

Specifications subjected to change without notice.

All dimensions and weights for reference only; ICD drawing should be used for design purposes.

OC750 SERIES

HOD™
UV system

OC750-6

OC750-11



Lamp type	OR-ULH	OR-ULH
Lamp lifetime	16,000h	16,000h
Automatic Deposit Prevention Mechanism (DPM)	Included	Included
Housing material	Electro polished, high resistivity 316L	Electro polished, high resistivity 316L
Sensors	• Lamp output sensor • Lamp ON indication per lamp	• Lamp output sensor • Lamp ON indication per lamp
UVT sensor	Included	Included
Lamps per bank	6	11
Modularity Per one controller	One per channel	Up to 10 banks per channel
Channel depth (all models)	2300mm	2300mm
Channel width	750mm	750mm
Water level sensor	Included	Included
Weir	Optional	Optional
Control module		
Enclosure material	Epoxy painted carbonated steel	Epoxy painted carbonated steel
Enclosure rating	IP54	IP54
Ballast type	Electronic variable output	Electronic variable output
Communication	Modbus, TCP/IP	Modbus, TCP/IP
Electrical requirements	380-400 VAC 3 phases 440-480*/600* VAC 3 phases	380-400 VAC 3 phases 440-480*/600* VAC 3 phases

*Transformer required.

Specifications subjected to change without notice.

All dimensions and weights for reference only; ICD drawing should be used for design purposes.

OC1550-22 SERIES

HOD™
UV system

OC1550-22



Lamp type	OR-ULH
Lamp lifetime	16,000h
Automatic Deposit Prevention Mechanism (DPM)	Included
Housing material	Electro polished, high resistivity 316L
Sensors	• Lamp output sensor • Lamp ON indication per lamp
UVT sensor	Included
Lamps per bank	11
Modularity Per one controller	2 UV banks in a row Up to 10 banks per channel
Channel depth (all models)	2300mm
Channel width	1550mm
Water level sensor	Included
Weir	Optional
Control module	
Enclosure material	Epoxy painted carbonated steel
Enclosure rating	IP54
Ballast type	Electronic variable output
Communication	Modbus, TCP/IP
Electrical requirements	380-400 VAC 3 phases 440-480*/600* VAC 3 phases

* Transformer required.
Specifications subjected to change without notice.
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OC2350-33 SERIES

HOD™
UV system

OC2350-33

Lamp type	OR-ULH
Lamp lifetime	16,000h
Automatic Deposit Prevention Mechanism (DPM)	Included
Housing material	Electro polished, high resistivity 316L
Sensors	• Lamp output sensor • Lamp ON indication per lamp
UVT sensor	Included
Lamps per bank	11
Modularity Per one controller	3 UV banks in a row Up to 9 banks per channel
Channel depth (all models)	2300mm
Channel width	2350mm
Water level sensor	Included
Weir	Optional

Control module

Enclosure material	Epoxy painted carbonated steel
Enclosure rating	IP54
Ballast type	Electronic variable output
Communication	Modbus, TCP/IP
Electrical requirements	380-400 VAC 3 phases 440-480*600* VAC 3 phases

*Transformer required.
Specifications subjected to change without notice.
All dimensions and weights for reference only; ICD drawing should be used for design purposes.



For more information,
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Certifications



CE DECLARATION



ISO 9001 2015 – QUALITY
MANAGEMENT SYSTEM (QMS)



NSF CERTIFICATE



NSF CERTIFICATE



UL508 E113027 & CSA C22.2
NO.14-13 CERTIFICATE



ATLANTIUM QUALITY
POLICY