BIO UV Group

The water treatment specialist

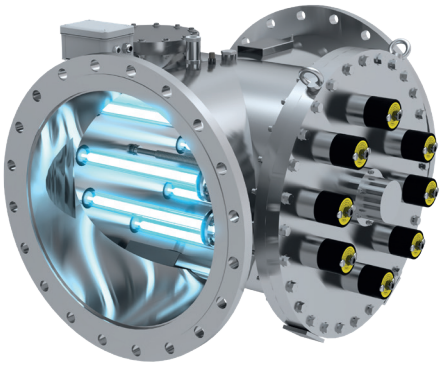
ultraviolet Integra

Integra range of UV systems are designed for the disinfection of intake water, discharging effluents and recirculating water at **fish farms and on wellboats**.
UV Integra system eliminates pathogens with a powerful dose of UV light delivered by strategically placed medium pressure UV lamps.

applications

- Recirculating Aquaculture System
- Wellboat
- Water re-use and Wastewater

benefits +



- Suitable for land and sea based facilities
- Improves algae control
- Savings in water, energy and chemical consumption
- Low capital expenditure (CAPEX) and installation costs with minimal service and limited footprint inplant room
- Suitable for indoor and outdoor applications
- Highly resistant to corrosion attack

main features

Veterinærinstituttet
Norwegian Veterinary Institute

- Automatic energy adjustment from 30-100% of full power
- Polychromatic 8000 hour medium pressure UV lamp system
- Advanced lamp efficiency
- Automatic “Smartdrive” wiper system and UV monitor
- Quick release powerhead for easy lamp replacement
- Touchscreen microprocessor control panel
- Data logging, BMS, ethernet and modbus communication ready
- Marine approved components of the power cabinet with optional dampers to meet wellboats environmental constraints
- Separate control command for optimized integration and modularity

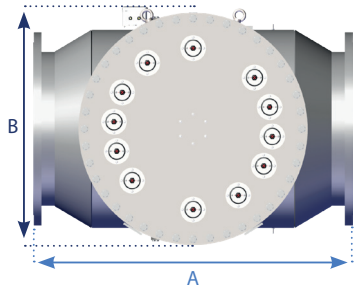
UV technology

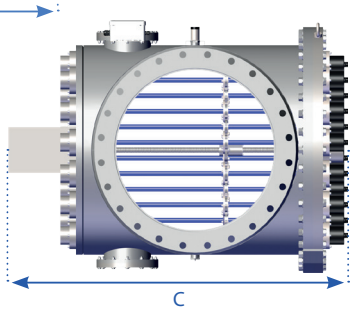
Medium pressure polychromatic ultraviolet light (UV-C) is highly effective at inactivating bacteria and viruses and also for oxidising organic compounds in water. Ultraviolet disinfection consists of a physical, chemical-free process, damaging the vital DNA of the bacteria and micro organisms.

technical data

Model	Max flow rate (NVI dose - min 25 mJ/cm²)	Max flow rate (90 mJ/cm²)	UV lamps : number x power consumption	Inlet / Outlet diameter (in mm)	Reactor			Power cabinet
					A (in mm)	B (in mm)	C (in mm)	H x W x D (in mm)
Integra 125	75	14	1 x 1.8 kW	DN125	510	334	451	820 x 600 x 600
Integra 150	180	89	2 x 2.5 kW	DN250	550	478	645	820 x 600 x 600
Integra 250	300	147	4 x 2.5 kW	DN300	550	519	734	1239 x 1000 x 567
Integra 300	615	211	4 x 3.7 kW	DN300	720	551	800	1239 x 1000 x 567
Integra 500	1330	629	6 x 3.0 kW	DN500	700	688	870	1239 x 1000 x 567
Integra 1000	2300	1022	6 x 6.0 kW	DN500	700	688	870	1239 x 1000 x 567
Integra 1500	3230	1118	8 x 6.0 kW	DN600	952	881	944	1639 x 1000 x 583
Integra 2000	3900	1489	8 x 7.0 kW	DN700	1094	941	1151	1639 x 1000 x 583
Integra 3000	5100	2480	8 x 8.8 kW	DN900	1244	1115	1371	1639 x 1000 x 583
Integra 4000	6600	3333	12 x 8.8 kW	DN700	1496	1496	1361	2029 x 1000 x 577

The performance of these devices has been calculated at the end of the lamps' life, with a UV transmittance of 93%.
Contact us for other flow rates.





quality standards

- ISO 9001 : 2015
- CE Compliance
- NVI approved

materials

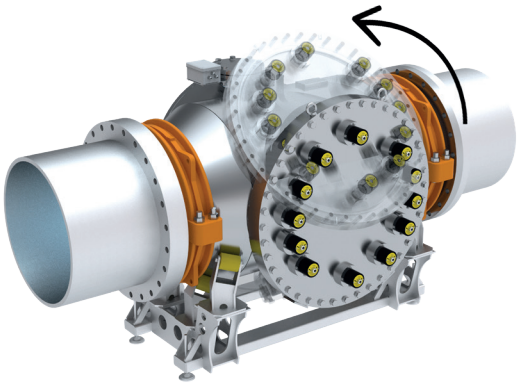
- Reactor Vessel: 316L electro-polished stainless steel
- Flanges: EN1092 PN10 / ANSI 150RF
- Lamp & Thimble: high purity quartz
- Panel: IP54 polyester coated mild steel
- Automatic wiper system

remote controls and signals

- Automatic flow pacing
- Modbub TCP communication capability or Unitronics Remote Operator Software
- Real-time UV dose display
- Inputs: water flow (4-20mA / ethernet), remote ON/OFF by external free contact
- Analog outputs : UV Intensity (0-10V and 4-20mA)
- Contact outputs : Lamp change required, low UV Intensity, remote control active, Fault, Lamp OK
- Ethernet outputs : Detailed alarm code
- Lamp power control (4-20mA): ethernet, auto, manual

option

The system can be mounted on a support so that it can rotate on its axis. The footprint is very low and maintenance is simplified.



contact

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