

### Illuminating water technologies with environmentally friendly Hydro-Optic™ UV



Atlantium Technologies is committed to the development of environmentally friendly water treatment technologies that contribute to a healthy ecosystem and positively impact public health. We value water and believe through cooperation and teamwork we can protect this precious resource.

Since 2003, Atlantium has helped to ensure water safety with its innovative and patented Hydro-Optic™ (HOD) UV solution. The system's novel approach to control, monitoring and performance has lead the HOD UV technology to support the biosecurity needs of appoximately 3,000 full-scale installations globally.

#### **Guaranteed Process Control and Water Safety**



The HOD UV system features the unique Total Internal Reflection technology that recycles UV light energy, ensures homogenous UV dose distribution and provides superior power (kW) efficiency compared to traditional UV.



#### **Enhanced HOD UV Light**

- Medium pressure high-intensity HOD UV lamps enable fewer UV lamps per system
- Medium pressure UV lamps provide a broad germicidal spectrum of polychromatic UV light (200-415 nm)
- · Lamps are protected by a quartz sleeve 5 times thicker than conventional quartz sleeves
- Significantly reduced lamp-related maintenance
- Quick and easy lamp replacement, does not require emptying of the water lines or depressurization



### **Real-Time Lamp Performance Monitoring**

- Dedicated UV sensor for each HOD UV lamp (feature unique to HOD UV technology)
- Continuously monitors HOD UV lamp output
- Ensures delivery of required UV dose at all times

## **Advanced Control System**

- · Continuously displays UV transmittance (UVT), flow, power and UV dose
- Provides real-time data on operation and efficacy
- Features built-in data logging, up to six months
- · Easy integration with the control SCADA system
- · Customized with user settings for alarm signals
- Features user-based management with changeable usernames and passwords





#### **Real-Time Water Quality Monitoring**

- Integrated UVT sensor on each HOD UV system
- Continuously monitors UVT%
- Optimizes system performance for actual, not estimated, UVT% levels

#### **Trusted and Proven**

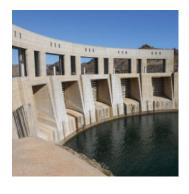
Where conventional UV has not been effective, Atlantium has worked alongside numerous tier-one companies across the aquaculture, ballast, beverage, biopharma, food, general industry, hydro, municipal and power markets because of the unique operational advantages of the HOD UV technology.

Proprietary technology with 60+ patents











#### **HOD UV Provides:**

- Disinfection
- Dechlorination (FAC)
- Biofouling Protection, Including Membrane Protection
- Advanced Oxidation Process for Chemical Decomposition, Including TOC Reduction
- Macrofouling Control (Zebra/Quagga Mussel Control)





#### **Solutions For:**

- Cooling Water Treatment
- Boiler Feed Water Treatment
- FGD Service Water
- Potable Water
- Process Water Treatment
- · Wastewater Treatment



Accredited and validated to the highest regulatory standards (EPA, FDA, NVI, PMO)

# **Global Service and Support**

HOD UV systems are globally supported and spare parts, such as UV lamps, are readily available 24/7.





**Atlantium Technologies**