



# Hydro-Optic™ UV **Water Biosecurity and Safety**

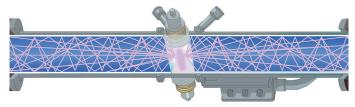


Atlantium's Hydro-Optic™ (HOD) UV technology, equally effective with cold or hot water, provides facilities with an energy-efficient and non-chemical process control solution. It prevents RO biofouling and provides proven disinfection for the PW/WFI loop. The technology protects sensitive RO membranes and CDI/EDI from chlorine by providing removal of FAC to non-detect levels, replacing problematic carbon filter or SBS dechlorination techniques. Ozone destruction is also provided. Integrated advanced software for real time monitoring and control of mission-critical parameters guarantees that water purity is maintained and complies with PW and WFI standards.



## Hydro-Optic™ UV Technology Spotlight

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



**Atlantium Technologies**