

# UltraDynamics®

## Series 8400

### Vertical Open Vessel

The Vertical Open Channel Series 8400 Ultraviolet Disinfection product is designed to provide user friendly operation, ease of installation and easy maintenance.

The Series 8400 incorporates state-of-the-art components to provide a simple, reliable product for the control of waterborne microorganisms. Low pressure germicidal arc lamps are protected by quartz sleeves and positioned vertically in an open channel.

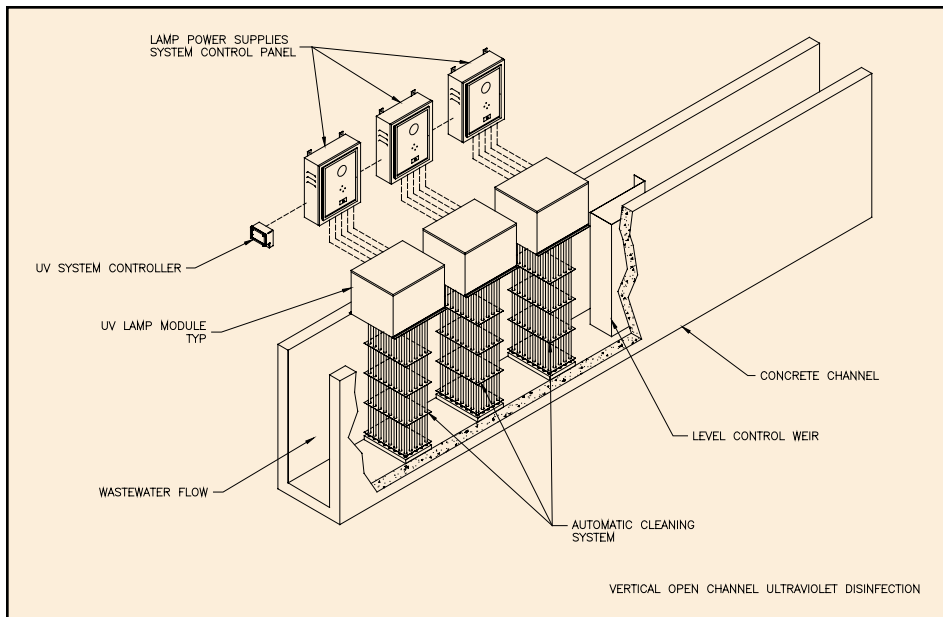
Reliability is our number one priority at UltraDynamics. Each 8400 Series system includes rugged stainless steel UV lamp modules designed to be lightweight for mounting in a concrete channel built on site. A power supply center houses all of the UV lamp power supplies and controls, providing easy access for operation and maintenance. Remote mounting of the power supply center protects it from channel flooding and ambient moisture. Interconnecting cables are protected with rugged PVC insulation and terminate through waterproof, multipin connectors. The built-in automatic cleaning system reduces manual quartz sleeve maintenance.



#### Features:

- ◆ Easy Installation
- ◆ Factory Installation Available
- ◆ Proven Vertical Lamp Configuration
- ◆ Automatic Sleeve Cleaning System
- ◆ Quick Disconnect Power Cables
- ◆ UV Intensity Monitor
- ◆ Designed for Indoor or Outdoor Operation
- ◆ Available in Low Pressure Standard Intensity and Low Pressure High output UV lamp technologies





## Technical Data

### UV Intensity Monitor

0-100% indication of UV intensity  
 Dual, fully adjustable alarm set points  
 Dual, form-C, unpowered alarm output contacts  
 240 Vac, 50/60 Hz, single phase, 3 Watts

### Channel

Level control weir  
 UV Lamp Module  
 304 stainless steel construction  
 24, 40 and 48 lamp configurations  
 Low pressure, UV lamps  
 Test tube type protective quartz sleeves  
 Automatic cleaning system

## Warranty and Capability

Severn Trent Services UltraDynamics® Ultraviolet Disinfection products are warranted for eighteen months from the date of invoice, or twelve months from the date of installation, whichever is earlier.

Disinfection technologies, water quality monitors and instrumentation for water and wastewater are areas of specialization. Over 35 years of industrial and municipal application experience in the water and wastewater industries.

## Brief Specification

The Ultraviolet Disinfection System shall incorporate low pressure, germicidal UV lamps, positioned vertically in an open channel. The system shall include a UV lamp module. Each UV lamp module shall consist of a stainless steel frame, protective quartz sleeves, germicidal lamps, automatic cleaning system, and power cables. The UV lamp module(s) shall be designed to mount into a concrete channel built on site and shall include a level control weir. A corrosion-resistant control panel shall include UV lamp power supplies UV intensity meter, elapsed time meter and power cable receptacles. The control panel shall be designed for remote wall mounting up to 10 feet (3 meters) from the UV lamp module(s).

System control shall be (manual) (automatic through the use of a PLC Based System Controller. The PLC controller shall provide on/off control of the UV lamp banks based upon a 4-20 mA dc flow signal.) The UV system shall be sized per USEPA protocol detailed in the EPA Design Manual, Municipal Wastewater Disinfection EPA/625/1-86-021.

The Ultraviolet Disinfection System shall be UltraDynamics® Series 8400.

### Severn Trent Services

3000 Advance Lane  
 Colmar, PA 18915  
 Telephone 215 997 4000  
 Fax 215 997 4062  
[marketing@severntrentservices.com](mailto:marketing@severntrentservices.com)

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