

# Optima HX Series

Aquafine Corporation High Performance Ultraviolet Systems

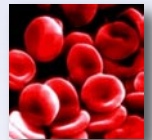
Aquafine's Optima HX Series utilizes low-pressure high output lamp technology for increased process performance and extended lamp life. Efficient and cost effective, the Optima HX is suitable in a variety of disinfection applications, such as food & beverage, pharmaceutical, semiconductor and dialysis.

With Aquafine's sophisticated design and sizing program Aquafluence™, the Optima HX reactor was designed combining multiple source summation (MPSS) and computational fluid dynamics

(CFD), critical in calculating fluence rates, flow patterns and velocity distribution.

With application specific reactor design, high-output lamp technology and a sophisticated microprocessor control, the Optima HX series features one of the lowest installed capital and life-cycle cost available in the marketplace today.

- Food & Beverage
- Pharmaceutical
- Micro-Electronics
- Dialysis
- Special Applications



## Advantages

- Smaller Footprint
- Remote On/Off
- Lower Capital/Life-Cycle Costs
- Application Specific Reactor Design
- Environmentally Friendly, Low Mercury Lamps
- Single-Ended Lamps for Quick Change-Outs
- Reduced Lamp Requirements Compared to LPLO Designs



Optima HX 08EDL



Optima HX 02DDS

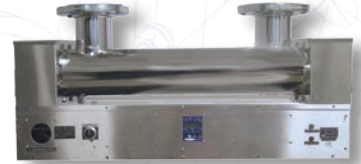
**Description:**

The Aquafine Optima HX Series consist of a 316L stainless steel treatment chamber and a 304 stainless steel control panel in one integral unit for models with UV treatment chambers up to 8" diameter.

For models with a 10" diameter or greater UV treatment chamber, the standard control cabinet is NEMA 3 modified rated carbon steel with an optional maximum cable length of 15 feet (5m) for remote cabinets. The control cabinet features a microprocessor or analog controller, its compact size maximizes installation flexibility and preserves floorspace while giving the option of a fixed or remote cabinet. Single-ended lamps and quartz sleeves allow quick change-outs without tools.

**Features:**

- NEMA 3R Painted Carbon Steel Control Cabinet
- 316L Stainless Steel Treatment Chamber
- Running Time Meter
- Lamp Status Indicator
- 150psig (10barg) Standard Operating Pressure
- Proprietary Hydraulic Management System
- 9,000 Hour Single Ended Lamps/High Purity Quartz
- All Models are CE and UL (pending)
- Local/Remote Operation (24V DC)\*



Optima HX 02DDS

**Options:**

- 304 Stainless Steel Cabinet
- UV Vision-2000™ G400 Microprocessor Controller\*
- UV & Temperature Monitoring System
- UV Intensity 4-20m, 0-10V DC Output\*
- Lamp-Out Alert
- Viton Gaskets & O-rings
- Stainless Steel Compression Nuts
- Sample Ports
- Sanitary Fittings
- Remote On/Off
- Validated 9,000 Hour Single Ended Lamps
- Additional Voltages



Optima HX 08EDL

**Specifications:**

Model: Optima HX	HX 02ADS	HX 02BDS	HX 02BDL	HX 02DDS	HX 02CDL	HX 02DDL	HX 04CDL	HX 06CDL	HX 05DDL	HX 06DDL	HX 08DDL	*HX 08EDL	*HX 08FDL	*HX 08GDL	*HX 10GDL	*HX 12GDL
MAX. OPERATING PRESSURE PSIG (BAR)	150 (10)															
OPERATING TEMPERATURE °F (°C)	Water: 40° - 80° (4° - 27°) Ambient Air 35° - 100° (2° - 38°) - other temperatures may be available, please contact Aquafine.															
NUMBER OF UV LAMPS	2	2	2	2	2	2	4	6	5	6	8	8	8	8	10	12
ELECTRICAL SUPPLY	120V/60Hz or 220-240V/50Hz, SINGLE PHASE, 2 W + GND															
OPERATING POWER (VA)	336	336	432	336	432	432	672	912	840	912	1152	1152	1152	1152	1392	1728
INLET / OUTLET SIZE INCHES (MM)	2 (50)	2 (50)	2 (50)	3 (80)	3 (80)	3 (80)	4 (100)	4 (100)	5 (1125)	6 (150)	8 (200)	8 (200)	8 (200)	8 (200)	10 (250)	12 (300)
HOT WATER SANITIZABLE WITH SENSOR °F (°C) <small>AVAILABLE WITH S.S. COMP. NUTS ONLY</small>	185° (85°)															
FLOW RATE DISINFECTION (@94% UVT) GPM (M <sup>3</sup> /HR)**	40 (9)	40 (9)	78 (18)	90 (20)	130 (30)	175 (40)	251 (57)	335 (76)	415 (94)	500 (114)	550 (125)	670 (152)	800 (182)	925 (210)	1100 (250)	1300 (295)
FLOW RATE DISINFECTION (@99% UVT) GPM (M <sup>3</sup> /HR)**	45 (10)	45 (10)	90 (20)	115 (26)	150 (34)	220 (50)	300 (68)	405 (92)	520 (118)	625 (142)	700 (159)	850 (193)	1070 (243)	1200 (273)	1400 (318)	N/A

\* Available with a 10" diameter or larger cylinder and will consist of a treatment chamber and a remote or fixed control cabinet.

\*\* Dose Level: 30 mJ/cm<sup>2</sup> after 9,000 hours of operation. Capacities listed are for Disinfection only; for other applications, please contact Aquafine.

All specifications are subject to change without notice.



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