

Optima HX™ Series

High Performance UV Systems

Efficient and cost effective, the Optima HX provides proven performance and technology in numerous applications such as Aquaculture, Food & Beverage, Life Sciences and Microelectronics.

SHOWN
Optima HX™
10 GDL

INDUSTRIES | Aquaculture, Food & Beverage,
Life Sciences, Microelectronics

FLOWRATES: 40-1400GPM @ 94%UVT,
45-2200GPM @ 99%UVT



Utilized for ozone destruction and disinfection, the Optima HX™ is not only cost effective, but proves to be a reliable, innovative and environmentally smart alternative.

APPLICATIONS

While disinfection is the most common application for ultraviolet (UV) technology in water treatment, ozone destruction is also used. Prior to point-of-use, the residual ozone needs to be destroyed to ensure the process water is not compromised. After considering the appropriate variables, a properly sized UV unit can be guaranteed to destroy the ozone to non-detectable limits, ensuring the integrity of the process and product.

SAFE & EFFECTIVE

UV does not 'add' anything to the water stream such as undesirable color, odor, chemicals, taste or flavor, nor does it generate harmful by-products. UV only imparts energy to the water stream in the form of ultraviolet light to inactivate micro-organisms or reduce chemical compounds present in the water.

For questions regarding your application needs, please contact your local Authorized Distributor or Aquafine Corporation for more information.

APPLICATIONS | Disinfection, Ozone Destruction

DESIGN CAPABILITIES | Custom Configurations

OPTIMA HX™ SERIES

The Optima HX™ series was designed with a sophisticated sizing program, combining Multiple Source Summation (MPSS) and Computational Fluid Dynamics (CFD), critical in calculating fluency rates, flow patterns and velocity distribution.

The series consists of 316L stainless steel treatment chamber and a stainless steel control panel in one integral unit for models with reactors up to 8" in diameter. Models HX 02BDSU and above have a standard UL TYPE - I painted carbon steel control cabinet.

With low-pressure high-output lamp (LPHO) technology, the HX lamp provides increased process performance and extended lamp life, while the systems compact size allows for a smaller footprint, maximizing installations flexibility. Single-ended (SE) HX lamps allow quick change-outs without tools.



Aquafine®
60 Years of Pure Quality

Optima HX™ Series

High Performance UV Water Treatment System

| Model: Optima HX™ | 02 ADS | 02 BDS | 02 CDS | 02 BDL | 02DDS | 02CDL | 02DDL | 04 CDL | 06 CDL | 05 DDL | 06 DDL | 08 DDL | 08 EDL | 08 FDL | 08 GDL | 10 GDL | 12 GDL | 12 HDL |
|--|---|------------------------|------------------------|------------------------|--------------------------|------------------------|------------------------------------|------------------|--------------|------------------|--------------|------------------------|------------------------------------|--------------------------|--------------------|----------------|----------------|--------|
| MAXIMUM FLOW RATE | | | | | | | | | | | | | | | | | | |
| DISINFECTION (@94% UVT) GPM (M³/HR)* | 40 (9) | 60 (14) | 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) | 1400 (318) | |
| DISINFECTION (@99% UVT) GPM (M³/HR)* | 45 (10) | 71 (16) | 90 (20) | 115 (26) | 150 (34) | 220 (50) | 300 (68) | 405 (92) | 520 (118) | 626 (142) | 700 (159) | 850 (193) | 1070 (243) | 1200 (273) | 1400 (318) | 1800† (409) | 2200‡ (500) | |
| NUMBER OF UV LAMPS (HX SE) | 2 | | | | | | 4 | 6 | 5 | 6 | 8 | | | | 10 | 12 | | |
| ELECTRICAL REQUIREMENTS | | | | | | | | | | | | | | | | | | |
| ELECTRICAL SUPPLY | 120/240V/50-60Hz, SINGLE PHASE, 2 W + GND | | | | | | | | | | | | | | | | | |
| OPER. POWER (NOMINAL WATTS) | 265 | | 360 | 265 | 360 | | 670 | 985 | 890 | 985 | 1300 | | | 1600 | 1920 | | | |
| BALLAST TYPE | ELECTRONIC | | | | | | | | | | | | | | | | | |
| CONTROLLER/DETECTOR | | | | | | | | | | | | | | | | | | |
| UV VISION 2000 G400 SERIES | N/A | | | | | | OPTION FOR REMOTE ("U") MODEL ONLY | | | | | | OPTIONAL | | | | | |
| UV TEMP. & MONITORING SYSTEM | OPTIONAL | | | | | | | | | | | | | | | | | |
| LAMP STATUS INDICATOR | STANDARD | | | | | | | | | | | | | | | | | |
| LAMP OUT ALERT (LOA) | OPTIONAL | | | | | | | | | | | | | | | | | |
| RUNNING TIME METER | STANDARD | | | | | | | | | | | | | | | | | |
| HAND/OFF/AUTO (HOA) | NA | OPTIONAL | | | | | | | | | | | | | | | | |
| 4-20mA OUTPUT SIGNAL | OPTIONAL | | | | | | | | | | | | | | | | | |
| CONTROL CABINET | | | | | | | | | | | | | | | | | | |
| CC SYSTEM RATING | C.S - UL TYPE 1, S.S. - UL TYPE 3R FOR REMOTE "U" ONLY | | | | | | | | | | | | C.S - UL TYPE 1, S.S. - UL TYPE 3R | | | | | |
| MATERIALS OF CONST. STD / "U" | 304 S.S. / C.S., OPTIONAL 304 S.S | | | | | | | | | | | | C.S., OPTIONAL 304 S.S | | | | | |
| TREATMENT CHAMBER | | | | | | | | | | | | | | | | | | |
| MATERIALS OF CONSTRUCTION | 316L STAINLESS STEEL | | | | | | | | | | | | | | | | | |
| INTERNAL SURFACE FINISH | Ra 32 (Ra 15 OPTIONAL) | | | | | | | | | | | | | | | | | |
| OPERATING TEMPERATURE °F (°C) | Water: 40° - 104° (5° - 40°) Ambient Air: 34° - 104° (1° - 40°) | | | | | | | | | | | | | | | | | |
| MAX. OPER. PRESSURE PSI (BAR) | 150 (10) | | | | | | | | | | | | | | | | | |
| INLET/OUTLET FLANGE INCHES (MM) | 2 (50) | | | 3 (80) | | | 4 (100) | | | 6 (150) | | | 8 (200) | | | 10 (250) | | |
| HOT WATER SANIT. °F (°C) | 170° (77°) AVAILABLE WITH S.S. COMP. NUTS & VITON O-RINGS ONLY | | | | | | | | | | | | | | | | | |
| SANITARY FITTINGS | OPTIONAL | | | | | | | | | | | | | | | | | |
| DIMENSIONS - FOR REFERENCE ONLY | | | | | | | | | | | | | | | | | | |
| OVERALL DIMENSIONS INCHES HXWXD | 20.50 X 38.50 X 7 | 15 X 40 X 12 | 15 X 40 X 13.50 | 15 X 68 X 12 | 21.50 X 40 X 15.50 | 22 X 68 X 10 | 24 X 68 X 11 | 22 X 68 X 10 | | 24 X 68 X 11 | | 27 X 68 X 12 | 44.50 X 67 X 14.50 | 46.50 X 67 X 16.50 | 48.50 X 67 X 18.50 | | | |
| OVERALL DIMENSIONS MM HXWXD | 521 X 968 X 176 | 366 X 1010 X 300 | 364 X 1012 X 338 | 366 X 1727 X 300 | 540 X 1010 X 387 | 556 X 1721 X 254 | 607 X 1721 X 274 | 556 X 1721 X 254 | | 610 X 1721 X 280 | | 679 X 1721 X 298 | 1121 X 1702 X 362 | 1174 X 1702 X 413 | 1223 X 1702 X 464 | | | |

* Dose Level: 30 mJ/cm² after 9,000 hours of operation. † Inlet/Outlet Flange inches (mm): 10 (250) ‡ Inlet/Outlet Flange inches (mm): 12 (300)



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Aquafine is an ISO 9001:2008 certified company.

All specifications are subject to change without notice.
For additional requirements, please contact Aquafine Corporation.