Applications

The Orenco® UV and AXUV Disinfection Units provide UV disinfection in residential applications after advanced secondary treatment (10 mg/L cBOD₅/TSS), when disinfection is required before dispersal. Treated effluent flows by gravity through the contact chamber and around the UV lamp where it is disinfected in a 360-degree contact zone.

Orenco UV units dramatically reduce bacteria and viruses. In side-by-side NSF® testing, they reduced bacteria by 99.999% (5 logs), meeting or exceeding the performance of other residential UV disinfection units.

Both the Orenco UV and AXUV Disinfection Units require installation inside a pump or gravity discharge basin or in a separate tank following advanced secondary treatment. Both are gravity-flow units.

The AXUV is specifically designed to follow AdvanTex® Treatment Systems. It can be also be mounted inside of the AX20-RT Treatment System.

To Order

Call your nearest Orenco Systems®, Inc. Distributor. For nearest Distributor, call Orenco at 800-348-9843, or visit www.orenco.com and click on “Where to Buy.”

Warning: UV radiation burns retinas and skin! Do not look directly at an operating UV lamp or expose skin to UV lamp light!
**UV Disinfection Unit Components**

- Power cord
- Cord grip
- Vented lamp handle
- Outlet
- 3-in. (80-mm) Quick-disconnect coupling (2 pieces)
- Contact chamber
- UV lamp
- Teflon sleeve
- Flow-through spacer

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**Performance**

**Typical contact chamber UV**

<table>
<thead>
<tr>
<th>Lamp</th>
<th>Lamp length</th>
<th>Lamp output at 1 meter</th>
<th>Minimum target dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>276,000 µW/s/cm² at 1 gpm (0.06 L/sec)</td>
<td>31 in. (787 mm), 92 VAC, 50 or 60 Hz, 425 mA, 38 W; 254 nm UVC intensity at 1m is 125 µW/cm²</td>
<td>31 = 31 in. (787 mm)</td>
<td>30,000-38,000 µW/s/cm²</td>
</tr>
<tr>
<td>55,000 µW/s/cm² at 5 gpm (0.32 L/sec)</td>
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<tr>
<td>20% lamp degradation</td>
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<tr>
<td>28,000 µW/s/cm² at 10 gpm (0.63 L/sec)</td>
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</tr>
</tbody>
</table>

**Power cord length**

- Blank = 25 ft (7.62 m)
- 50 = 50 ft (15.2 m)

**Cord plug**

- UL listed four-pin connector, lamp-holder, electric discharge, 1000 V or less

**Ballast**

- 120 VAC, 50 or 60 Hz, located in UL listed Orenco® control panel

**Circuit breaker**

- 10 A, OFF/ON switch; Single-pole
- 120 V*, DIN rail mounting with thermal magnetic tripping characteristics

**Audible alarm**

- 95 dB at 24 in. (610 mm), warble-tone sound

**Visual alarm**

- ¼-in. (22-mm) diameter red lens,
  - “Push-to-silence,” UL Type 4X rated,
  - 1 W LED light, 120 V

* Standard on VeriComm, MVP, and UVIB panels. Not available with UVIBSUB panels.

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**Model Codes for Ordering**

**UV - 125/31 -**

- Power cord length:
  - Blank = 25 ft (7.62 m)
  - 50 = 50 ft (15.2 m)
- Control panel options:
  - UVIB = panel with audible and visible alarms
  - UVIBSUB = sub-panel for use with separate control panel
- Lamp length:
  - 31 = 31 in. (787 mm)
- Lamp output at 1 meter:
  - 125 = 125 µW/cm²
- Orenco UV disinfection unit

**AXUV - 125/31 -**

- Power cord length:
  - Blank = 25 ft (7.62 m)
  - 50 = 50 ft (15.2 m)
- Lamp length:
  - 31 = 31 in. (787 mm)
- Lamp output at 1 meter:
  - 125 = 125 µW/cm²
- AdvanTex™ UV disinfection unit