Advanced UV Water Purification Systems
For Residential Potable Applications

Always:

GLOBAL LEADER IN UV WATER PURIFICATION

Pure, safe water.

powered by

caactus

powered by CROSSFIRE TECHNOLOGY
Cactus X-8
For flows up to 15 US GPM (57L/min (3.4m³/hr)) -30mJ/cm² dose or greater with minimum UVT of 85%

Cactus X-12
For flows up to 24 US GPM (91L/min (5.4m³/hr)) -30mJ/cm² dose or greater with minimum UVT of 85%

**MODELS FOR RESIDENTIAL POTABLE APPLICATIONS**

**CROSSFIRE TECHNOLOGY**

- Field-Proven with a decade long track record in demanding municipal, industrial and commercial applications.
- Cactus reduces pathogens (e-coli, bacteria, cysts and most viruses) to safe levels.
- Provides peace of mind with UV purification dose that exceeds global standards.

**THE MOST ADVANCED UV PURIFICATION TECHNOLOGY AVAILABLE**

- Cactus is the only residential UV purification system with Crossfire Technology.
- High-output UV lamps inside elliptical reflectors target pathogens with radiation from 360°, providing the highest UV dose possible to deactivate pathogens and ensure safe drinking water.

**QUICK AND EASY MAINTENANCE**

- Cactus is as easy to maintain, as it is effective.
- No extra space required for lamp removal.
- The lamps last a full year, and are as easy to change as a table lamp.
- The view port lets you know the lamps are working.
- No draining, disassembly, or risk of quartz breaking, like ordinary UV systems.
- The standard Anti-Fouling Kit reduces the possibility of quartz fouling.

**WARRANTY**

- Industry leading warranty – see specifications.

**THE CHALLENGES OF CONVENTIONAL UV SYSTEMS THAT CORE CROSSFIRE TECHNOLOGY WAS DESIGNED TO SOLVE**

- Ineffective UV treatment
  - Validation standards vary; potable water systems often based on levels not effective in "real-world" conditions.
  - Not effective in low UVT water.
  - UV shadowing allows pathogens to transit live.
  - Only one path length of UV energy; inefficient as most turns to heat.
  - Lamps overheat in low flow or no-flow conditions causing a drop in dose to ineffective levels.
  - Very cold water (drilled well sources) cause a drop in lamp temperature resulting in a drop in dose to ineffective levels.
  - Impossible to inspect quartz to determine if it is fouled without removing it.

- Even routine lamp changes are time consuming and risky
  - Removing a lamp to replace it, or clean fouled quartz tubes often results in broken quartz tubes requiring expensive replacement and risk of quartz shards in the water column.
  - Removal of lamps requires as much free outboard room as the system is long; often this is overlooked when installed, meaning that just to change lamps, the systems have to be decommissioned, drained and removed from mounting.

**WATER QUALITY**

- *Crossfire Technology*
  - Use of elliptical reflectors allows treatment of pathogens from 360° arc.

**STAY SAFE FROM E-COLI, CRYPTO, BACTERIA, VIRUS...**

- PROTECT YOUR FAMILY’S WATER WITH CACTUS® AND CORE CROSSFIRE® TECHNOLOGY

- Cactus has advanced UV purification technology and is the only residential UV purification system with Crossfire Technology. Cactus systems are engineered and competitively priced for residential use. Cactus retains the core features of Crossfire Technology like easy lamp replacement, elliptical reflectors for maximum dose and visual quartz inspection.

Now homeowners have the advantage of UV Pure’s patented Crossfire Technology – the global gold standard used in thousands of industrial and municipal applications, and chosen by Boeing® to purify water on board the new 787 Dreamliner®.

**FEATURES AND BENEFITS OF CORE CROSSFIRE TECHNOLOGY**

**THE MOST EFFECTIVE WATER PURIFICATION**

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**FEATURES**

- Flexible stainless steel hook-up hoses (Optional on all models)
  - Part number: R400007

- Power Conditioner (Optional on all models)
  - Part number: 150207

- Anti-Fouling Kit (Standard on all models)
  - Part number: Z400005

**ACCESSORIES**

- **Flexible stainless steel hook-up hoses**
  - Part number: R400007

- **Power Conditioner**
  - Part number: 150207

- **Anti-Fouling Kit**
  - Part number: Z400005
# Cactus® System Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>Cactus X-8</th>
<th>Cactus X-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>PART NUMBER (115 Volt)</td>
<td>R47</td>
<td>R48</td>
</tr>
<tr>
<td>Validation / Certification</td>
<td>Laboratory Validated by GAP EnviroMicrobial Services Ltd. using the same dose testing standards as NSF/ANSI 55 Class A. Certified to AB 1953.</td>
<td></td>
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<tr>
<td>UV Dose</td>
<td>minimum dose of 30 mJ/cm^2 – 4 Log (99.99%) or greater reduction of bacteria, cysts and most viruses. Please refer to dose charts.</td>
<td></td>
</tr>
<tr>
<td>Minimum UV Transmittance</td>
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<td></td>
</tr>
</tbody>
</table>
| *Max Flow Rate | 15 US gpm (57 L/min) (3.4 m^3/hr) – 30 mJ/cm^2 dose  
12 US gpm (33 L/min) (1.98 m^3/hr) – 40 mJ/cm^2 dose | 24 US gpm(91 L/min) (5.4m^3/hr) – 30 mJ/cm^2 dose  
18 US gpm (50.4 L/min) (3.0 m^3/hr) – 40 mJ/cm^2 dose |
| Water Pressure | 0 psi (69 kPa) to 100 psi (690 kPa); units are tested to 240 psi (1.6 MPa) |  |
| Inlet and Outlet Connections | 1" NPT |  |
| Voltage | Models available in 115V configurations |  |
| Protection from Power Fluctuations | Power conditioner that meets UL 1449. (Optional) Part #150207 |  |
| Maximum Power Consumption | 93W | 114W |
| Electrical Certification | Intertek ETL (UL, ULC and CE equivalent) |  |
| Lamps | Low pressure, high output proprietary lamps contain up to 30 mg of mercury (Hg); rated for 9000 hours (1 year) of continuous use |  |
| Maintenance | Bulbs require replacement every 9000 hours (1 year). Anti-fouling system included as standard. Minimizes effects of minerals coming out of solution and eliminates a drop in UV dose in high water temperature that is common with conventional UV systems |  |
| Electronic Ballast | Auto power-regulated smart ballast is integrated with micro-processor control system; protected from power fluctuations |  |
| “Lamp On” Indicator | Standard on all models; indicates that lamps are energized |  |
| Dimensions (H, W, D) | 27.3 x 7.5 x 7.8" (694 x 190 x 198mm) | 32 x 7.5 x 7.8" (813 x 190 x 198mm) |
| Weight – Dry | 15.5 lbs (7.0 kg) | 17 lbs (7.7 kg) |
| Weight – Wet | 17.4 lbs (7.9 kg) | 19.2 lbs (8.7 kg) |
| Warranty | 1 year limited warranty on bulbs; 3 year limited warranty on electrical components and quartz sleeve; 5 year limited warranty for structural, hardware and mechanical components |  |
| EPA FIFRA Certified | EPA Est. No. 075213-CAN-001 |  |
| Patents | Patented in US 6,707,048, Canada 2,463,503, Australia 2002333084, Mexico 248805, Patents pending in Europe, Eurasia, Japan, UK |  |

Cactus systems with patented Crossfire Technology provide microbiological purification of drinking water. With a Cactus system properly installed, fail-safe engineering ensures that no potentially dangerous microorganisms can enter a drinking water distribution system. UV Pure recommends the use of other filtration systems to treat chemical and other non-microbiological contaminants. To find out everything, visit www.uvpure.com. UV Pure®, Pure Safe Water. Always® and Crossfire® Technologies are registered trademarks of UV Pure Technologies Inc. Boeing® and Dreamliner® are registered trademarks of The Boeing Company.