



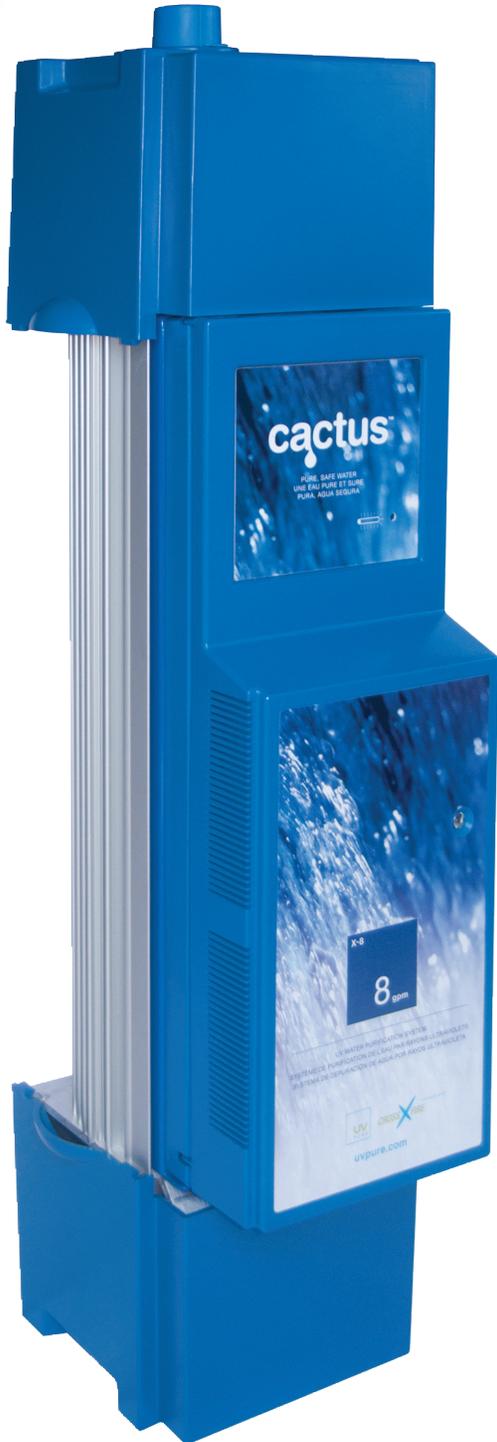
Pure, safe water.

Always:

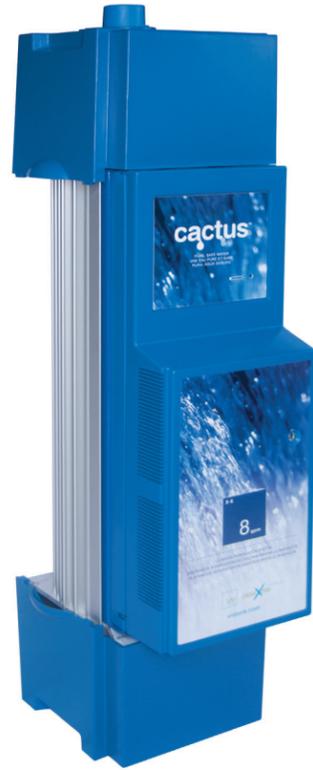
GLOBAL LEADER IN UV WATER PURIFICATION



**Advanced UV Water Purification Systems
For Residential Potable Applications**

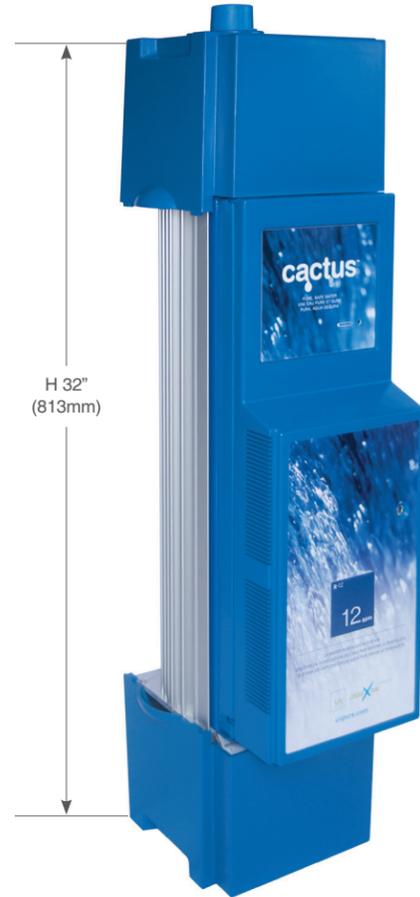


cactus[®]
powered by **CROSS X FIRE** TECHNOLOGY



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

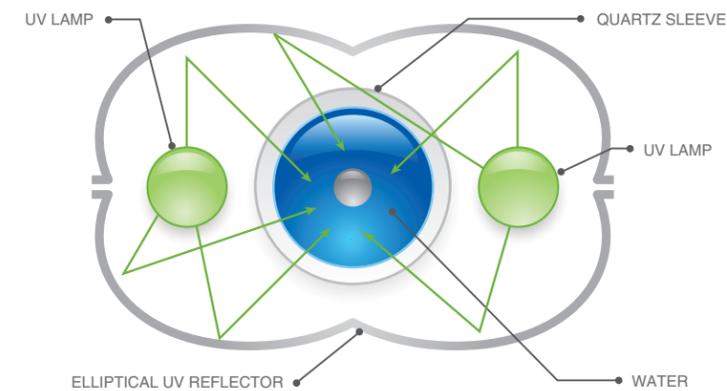
For flows up to 24 US GPM (91L/min (5.4m³/hr) -30mJ/cm² dose or greater with minimum UVT of 85%



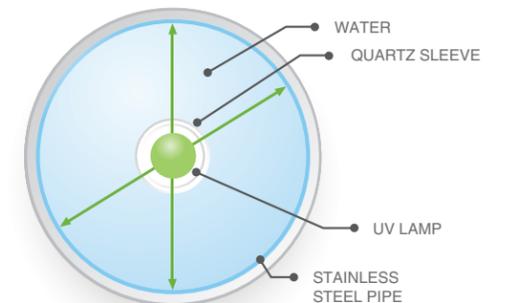
UV PURE'S PATENTED CROSSFIRE® TECHNOLOGY IS AT THE CORE OF ALL OUR SYSTEMS

- It is a better mousetrap. Proven since 1998 in over 12,000 applications, globally.
- It means a disinfection dose 2.4 times greater than conventional UV systems for the same energy input and cost.
- It means easy lamp changes.
- It means simple visual quartz inspection.
- It means Pure safe water. Always®.

CROSSFIRE TECHNOLOGY



CONVENTIONAL UV SYSTEM



FEATURES

**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®.

Cactus Model	Peak Flow at 40 mJ/cm² dose 75% UV Transmittance	Peak Flow at 40 mJ/cm² dose 85% UV Transmittance
X-8	8 USGPM (30.3 L/min) (43.7 m³/day)	12 USGPM (33.3 L/min) (1.98 m³/day)
X-12	12 USGPM (45.4 L/min) (65.5 m³/day)	18 USGPM (50.4 L/min) (3.0 m³/day)

ACCESSORIES



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

FEATURES AND BENEFITS OF CORE CROSSFIRE TECHNOLOGY

THE MOST EFFECTIVE WATER PURIFICATION

- 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.

CACTUS® SYSTEM SPECIFICATIONS

Model	Cactus X-8	Cactus X-12
PART NUMBER (115 Volt)	R47	R48
Validation / Certification	Laboratory Validated by GAP EnviroMicrobial Services Ltd. using the same dose testing standards as NSF/ANSI 55 Class A. Certified to AB 1953.	
UV Dose	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.	
Minimum UV Transmittance	85%	
*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	