

UPSTREAM™

Pure, Safe Water. Worry-free.
Self-cleaning, maintenance-free, and smart
UV purification systems from
UV Pure Technologies.™



Upstream™ System Specifications with Crossfire Technology™						
Model Number	NC 10-75*	NC 10-50*	NC 15-75*	NC 15-50*	NC 30-75, 1**	NC 30-75, 1.5**
Max Flow Rate** (US gpm)	10 US gpm, 38 L/min, 2.3 m³/hr	10 US gpm, 38L/min, 2.3 m³/hr	15 US gpm, 57 L/min, 3.4 m³/hr	15 US gpm, 57 L/min, 3.4 m³/hr	28.5 US gpm, 108 L/min, 6.47 m³/hr	28.5 US gpm, 108 L/min, 6.47 m³/hr
UV transmittance* (at 254nm -%UVT)	75%	50%	75%	50%	75%	75%
Multiple System Flow Capacity	Engineered for multiple systems in parallel installations, for flow rates up to 1 MGD.					
Redundancy	Additional backup systems can be added cost effectively.					
Built-in Microprocessor	Dual smart sensors with onboard LCD displays system performance (UV output, water quality, performance and diagnostics), message history and remaining lamp lifetime.					
Remote Alarm Available	Signals safe, warning and critical status, LCD displays system status. Audible alarm for critical water quality. Wireless—works up to 150 feet (LOS) from unit.					
Solenoid Valve	Automatic shut-off valve available as option on all models.					
Self-Cleaning	Stainless steel automatic wiper-blade system.					
Maintenance	Onboard and remote system indicates when to change lamps—every 12 months or 9,000 hours of continuous operation.					
Inlet and Outlet Connections	1"	1"	1"	1"	1"	1.5"
Flow Restrictor Included	Yes	Yes	Yes	Yes	Yes	No
Pre-filtration	Dual gradient sediment 50x5 micron and/or carbon filter recommended.					
Operating Pressure	0-100 psig 0-690 kPa	0-100 psig 0-690 kPa	0-100 psig 0-690 kPa	0-100 psig 0-690 kPa	0-100 psig 0-690 kPa	0-100 psig 0-690 kPa
Power Consumption	118W	148W	148W	190W	190W	190W
Pressure Drop at 75% rate cap.	7 psig (48 kPa)	7 psig (48 kPa)	7 psig (48 kPa)	7 psig (48 kPa)	7 psig (48 kPa)	2 psig (13 kPa)
Voltage	North American models: 100-132V. Global models: 90-260V.					
Electronic Ballast	Auto power-regulated, protected from power fluctuations, onboard lightning arrestor, built-in surge suppressor.					
Electrical	Intertek ETL (UL, ULC and CE equivalent)					
Dimensions (Height, Width, Depth)	32"x7.5"x9.3" (813x190x 236mm)	35.8"x7.5"x9.3" (908x190x 236mm)	35.8"x7.5"x9.3" (908x190x 236mm)	39.8"x7.5"x9.3" (1010x190x 236mm)	39.8"x7.5"x9.3" (1010x190x 236mm)	40"x7.5"x9.3" (1016x190x 236mm)
Warranty	1 year lamp, 3 years electrical, 5 years mechanical.					
The optional shutoff valve requires min. 10psig to operate. 100-240Vac models available with same operating specifications.						

*Ultraviolet Transmittance (UVT) is a measure of the percentage of UV light that may pass through the water.
**Upstream systems achieve a minimum dose of 40 mJ/cm² at specified flow rates.

Six Upstream™ Models: Flow Rates and Applications						
	NC 10-75 75% UVT*, 1"	NC 10-50 50% UVT*, 1"	NC 15-75 75% UVT*, 1"	NC 15-50 50% UVT*, 1"	NC 30-75 75% UVT*, 1"	NC 30-75 75% UVT*, 1.5"
Max Flow Rate** (US gpm)	10 US gpm, 38L/min, 2.3 m³/hr	10 US gpm, 38 L/min, 2.3 m³/hr	15 US gpm, 57 L/min, 3.4 m³/hr	15 US gpm, 57 L/min, 3.4 m³/hr	28.5 US gpm, 108 L/min, 6.47 m³/hr	28.5 US gpm, 108 L/min, 6.47 m³/hr
Recommended Application, or Water Source	Drilled Deep Wells	Unprotected water sources: Surface Water - Lakes, Streams, Cisterns, Dug Wells.	Drilled Deep Wells	Unprotected water sources: Surface Water - Lakes, Streams, Cisterns, Dug Wells.	Drilled Deep Wells	Drilled Deep Wells

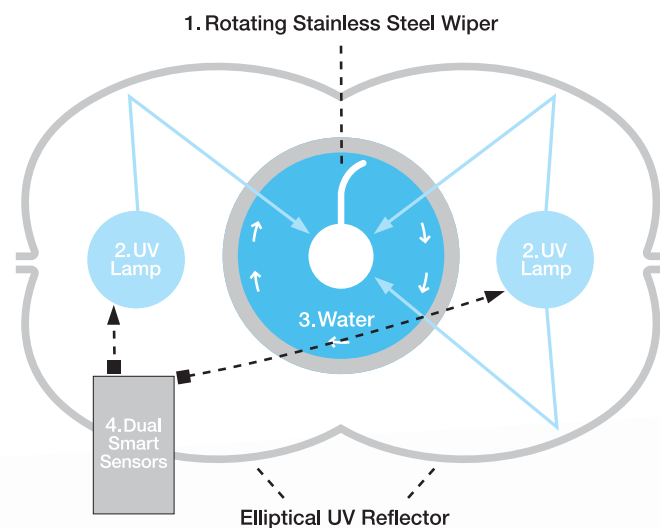
*Ultraviolet Transmittance (UVT) is a measure of the percentage of UV light that may pass through the water.
**Upstream systems achieve a minimum dose of 40 mJ/cm² at specified flow rates.

uvpure.com



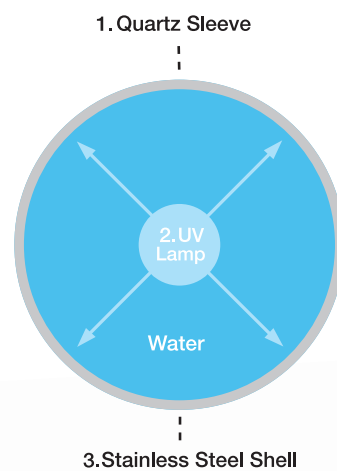
UV Pure's patented Crossfire Technology™ is globally recognized as the most advanced and effective UV purification system. Our certified Hallett™ systems provide pure, safe drinking water in thousands of regulated environments such as municipalities and hospitals. The Upstream™ series of UV systems provides pure water at the same high standards, but at an affordable price for installations not requiring certification. All Upstream systems are laboratory validated. A remote wireless monitor is available.

UV Pure's patented Crossfire Technology™ is a generation beyond ordinary UV systems: Self-cleaning, maintenance-free and smart technology



1. Rotating stainless steel wiper keeps quartz clean.
2. Two high powered UV lamps inside elliptical reflectors deactivate all bacteria, viruses and cysts with 360° exposure.
3. Water flows inside quartz sleeve. Lamps are air cooled so the system will not overheat.
4. Dual smart sensors monitor lamp output and water quality.

Ordinary systems
Can't ensure safe water & need frequent maintenance.



1. Quartz sleeve inside water flow frequently gets fouled from minerals and biofilm - requires difficult disassembly and messy manual cleaning.
2. Single UV lamp radiates in just one direction. Germs can "hide" in UV shadows—water may not be safe.
3. Stainless steel shell acts like a waterheater in low-flow conditions and lamps lose power. Water may not be safe.

Ordinary UV systems are 'blind' – without UV sensors, safe water cannot be assured.

Visit uvpure.com for an animated demonstration of Crossfire Technology™

Pure, safe water.

Real Proof

- * No other UV systems are engineered to operate effectively with lake, stream, cistern and dug well waters (UVT as low as 50%).
- * Laboratory tested to deliver 40 mJ/cm2 dose; the same as NSF/ANSI 55 Class A standard.
- * Handles all dangerous pathogens - ecoli, viruses, bacteria and cysts like Cryptosporidium and Giardia.

From Every Angle

- * Proprietary reflectors deactivate pathogens from 360°.
- * Eliminates UV shadowing—a hazard found in all competing conventional systems.
- * Optimized Crossfire Technology™ reflector provides 24% higher dose.

Digital Display

- * Monitors lamp output, water transmittance, water and air temperature.
- * Indicates when water is not safe, diagnoses problems and keeps a time-stamped record of all events.
- * Notifies you when it's time to change UV lamps (after a full year of continuous use).

In Extreme Conditions

- * Constant optimum lamp temperature maintained using computer-managed cooling system.
- * Enables constant lamp output in conditions ranging from 1°C to 40°C (water and air), while competing UV systems can lose up to half their power.

Always.

Intelligent Sensors

- * Patented dual-sensor system monitors both UV output AND water quality.
- * Optional solenoid valve shuts water off in unsafe conditions.

Remote, Foolproof Wireless Alarm Available

- * Wireless remote handles typical installations: works up to a range of approximately 150 feet line-of-sight.
- * LCD display notifies safe, caution and critical condition.
- * Audible alert for caution and critical status.

Worry-Free

- * Patented automatic mechanical quartz cleaning system keeps quartz from fouling—it never needs cleaning.
- * Automatic purge valve ensures no fouling in low- or no-flow conditions.
- * No quartz breakage (quartz not removed for lamp replacement or cleaning).
- * Operates in extreme water hardness levels.
- * Safe even for surface water applications like lakes, streams, cisterns and dug wells.

Maintenance-Free

- * Lamps are in air, not in water—so they are easy to change (no draining required).
- * Electronic ballast features surge protection.
- * Built with "316" Stainless Steel, impact-resistant ABS plastic and anodized aluminum."
- * Hook-up is easy to install.

Upstream™ Operates in the Widest Range of Raw Water Conditions		
WATER CONDITIONS	EFFECTIVE TREATMENT RANGE	
	Min	Max
Hardness	0	50 Grains (855 mg/L)
Iron	0	3 mg/L (ppm)
Manganese	0	0.5 mg/L
% UV Transmittance	Both 75% and 50% UVT	100%
pH	6.00	9.00
Total Dissolved Solids (TDS)	0	1000 mg/L
Water Temperature	1°C (34°F)	40°C (104°F)
Air Temperature	1°C (34°F)	40°C (104°F)
Turbidity	0 NTU	1 NTU
Water Pressure	10 PSI (69 kPa)	100 PSI (690 kPa)