

Watts® UV Disinfection Systems



Applications

- Wells
- Homes
- Water systems
- Aquaculture
- Food service
- Water coolers
- RO systems



Independent lab validated

Watts UV systems have been tested by BioVir Laboratories, using *E.coli* bacteria. Test results indicate Watts UV systems are capable of providing the 40 mJ/cm² dose requirement for *E.coli* bacteria disinfection at maximum flow rates for all four models. Based on these tests, the log reduction of *E.coli* bacteria was between 2.07 to 3.03, which is 99.1 to 99.9 percent reduction of *E.coli* bacteria.

Features & Benefits

- Disinfection without chemicals.
- Effective disinfection for chlorine resistant bacteria, virus cysts.
- Lamps rated for 12 month continuous service life.
- Highly polished 304 stainless steel reactor chamber.
- Audible and visual alarm indicating lamp failure.
- Easy lamp replacement service.
- Available in 110 v and 230v.
- 30mj/cm² dose at specified flow rate at the end of lamp life.
- Quartz sleeve and lamps.

Specifications

Chamber materials	304SS
Max. water temperature	104°F (40°C)
Min. water temperature	36°F (2°C)
Max pressure	125 psi
UV dose (end of life)	30 mj/cm ²
Lamp life	9,000 hrs
Lamps per chamber	Single

Water quality guidelines

Total Iron	less than 0.3 mg/l
Hydrogen sulfide	less than 0.05 mg/l
Turbidity	less than 10 mg/l
Manganese	less than 0.05 mg/l
Hardness	less than 7 grains
UV transmittance	greater than 90%

Note: Minimum water quality guidelines are recommended to ensure proper operation and continuous disinfection.

PRODUCT CODE	FLOW RATE (GPM)	PIPE SIZE (NMPT)	DIMENSIONS (L X W X H)	ELECTRICAL	SHIPPING (LBS.)
WUV2-110	2	1/2"	18" x 6" x 5-3/8"	110-130 v / 50-60 Hz	6
WUV2-230	2	1/2"	18" x 6" x 5-3/8"	200-250 v / 50-60 Hz	6
WUV6-110	6	3/4"	25-1/2" x 6" x 5-3/8"	110-130 v / 50-60 Hz	7
WUV6-230	6	3/4"	25-1/2" x 6" x 5-3/8"	200-250 v / 50-60 Hz	7
WUV8-110	8	3/4"	32" x 8-1/4" x 3-3/4"	110-130 v / 50-60 Hz	9
WUV8-230	8	3/4"	32" x 8-1/4" x 3-3/4"	200-250 v / 50-60 Hz	9
WUV12-110	12	1"	41-1/2" x 8-1/4" x 3-3/4"	110-130 v / 50-60 Hz	17
WUV12-230	12	1"	41-1/2" x 8-1/4" x 3-3/4"	200-250 v / 50-60 Hz	17



Watts Water Quality & Conditioning Products



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Hydro-Safe® UV Disinfection Systems

Top quality systems designed to reduce bacteria, virus & other harmful contaminants.



Applications

- Well water
- Surface water
- Municipal water
- Food service & processing
- Hospitals
- Aquaculture
- Electronics
- Pharmaceuticals
- Hotels
- Water bottlers
- Laboratories
- Marine

Features & Benefits

- Provides disinfection without the use of chemicals
- Reduces bacteria, virus and protozoa by 99.99%
- Electronic ballasts providing constant output current over the entire operating range
- Improved surge protection
- Annual lamp replacement reminder feature
- Polished, 304 stainless steel reactor chambers for durability
- Easy servicing (no need to disconnect water flow during lamp replacement)
- Open end quartz sleeves for optimum operating temperature and sealing efficiency
- Aluminum base for quick and easy servicing

Stainless steel models for flow rates to 24 GPM

Model No.	Flow Rate (GPM)	Dimensions			Pipe Size (MNPT)	Electrical	Ship Wt.
		Width	Height	Length			
HSUV-SS-05-1	0.5	2"	2"	11"	1/4"	110-130 v / 50-60 hz	5
HSUV-SS-05-2	0.5	2"	2"	11"	1/4"	200-250 v / 50-60 hz	5
HSUV-SS-1-1	1	2-1/2"	2-1/2"	15"	1/4"	110-130 v / 50-60 hz	5
HSUV-SS-1-2	1	2-1/2"	2-1/2"	15"	1/4"	200-250 v / 50-60 hz	5
HSUV-SS-2-1	2	2-1/2"	2-1/2"	17"	1/2"	110-130 v / 50-60 hz	6
HSUV-SS-2-2	2	2-1/2"	2-1/2"	17"	1/2"	200-250 v / 50-60 hz	6
HSUV-SS-5-1	5	2-1/2"	2-1/2"	21"	3/4"	110-130 v / 50-60 hz	7
HSUV-SS-5-2	5	2-1/2"	2-1/2"	21"	3/4"	200-250 v / 50-60 hz	7
HSUV-SS-8-1	8	2-1/2"	2-1/2"	35"	3/4"	110-130 v / 50-60 hz	10
HSUV-SS-8-2	8	2-1/2"	2-1/2"	35"	3/4"	200-250 v / 50-60 hz	10
HSUV-SS-12-1	12	7"	8"	37"	3/4"-1"*	110-130 v / 50-60 hz	18
HSUV-SS-12-2	12	7"	8"	37"	3/4"-1"*	200-250 v / 50-60 hz	18
HSUV-SS-24-1	24	7"	9-1/2"	37"	1"	110-130 v / 50-60 hz	23
HSUV-SS-24-2	24	7"	9-1/2"	37"	1"	200-250 v / 50-60 hz	23

Systems are rated for pressures to 125 psi. *Combo fitting. External ballast and power cord are included.

Hydro-Safe® UV Disinfection Systems

Top quality systems designed to reduce bacteria, virus & other harmful contaminants.



24 GPM Models with monitor

Hydro-Safe® UV systems with monitors

Models with monitors are specifically designed for residential and commercial installations where a 99.99% reduction of bacteria, virus and protozoa is required and when monitoring is desired. Systems with monitors keep track of UV intensity and elapsed running time for optimum performance. They also provide a visual and audible indicator, in the event lamp failure should occur. Options for remote monitoring and shut-off are available.

Features & Benefits

- Provides disinfection without the use of chemicals
- Reduces bacteria, virus and protozoa by 99.99%
- 245 nm monitors to keep track of UV intensity and lapsed running time
- Electronic ballasts provide constant output current over the entire operating range
- Lamp “on” and audible lamp failure indicators
- Annual lamp replacement reminder
- Improved surge protection
- Electro-polished 304 stainless steel reactor chambers for increased durability
- Easy servicing (no need to disconnect water flow during lamp replacement)
- Open end quarts sleeves for optimum operating temperature and sealing efficiency
- Non-corrosive aluminum base for quick and easy servicing

Models with 254 nm monitor

Model No.	Flow Rate (GPM)	Dimensions			Pipe Size (MNPT)	Electrical	Ship Wt.
		Width	Height	Length			
HSUV-SS-M-5	5	5"	3-1/2"	22"	3/4"	110-130 v / 50-60 hz	12
HSUV-SS-M-8	8	5"	3-1/2"	35-1/2"	3/4"	110-130 v / 50-60 hz	14
HSUV-SS-M-12	12	7"	8"	37"	3/4"-1"*	110-130 v / 50-60 hz	18
HSUV-SS-M-24	24	7"	9-1/2"	37"	1"	110-130 v / 50-60 hz	23

* Combo fittings.

NOTE: All systems rated for pressures to 125 PSI. Ballasts included with power cord.

Hydro-Safe® UV Disinfection Systems

High capacity models for flow rates from 40 to 800 GPM.



Hydro-Safe® High Capacity UV System



Controller

Features & Benefits

- UV intensity monitor detects 254 nm wave lengths and displays results on panel meter
- Audible and visual indicators to assure optimum performance
- Elapsed time meter measure running time for peak lamp output
- Separate NEMA 4 modified control panel for protection from the elements
- Flange connections (150 lb. raised face)
- Viewing port for operational monitoring
- Dry contact output for solenoid valve, horn and other electrical components
- Easy servicing (no need to disconnect water flow to change UV lamps)
- Removable reactor chamber flanges for easy access and cleaning
- High chamber temperature alarm provides audible and visual alarm if unit overheats
- Open end quartz sleeves & stainless steel nuts for optimum operating temperature & sealing
- 99.99% destruction of bacteria and viruses at rated flow rates
- Electronic ballast with internal damage limiting circuitry
- Polished, 316L stainless steel reactor chamber

Hydro-Safe® high capacity stainless steel UV systems (40-225 GPM)

Model No.	Flow Rate (GPM)	Dimensions			Pipe Size (MNPT)	Electrical	Ship Wt.
		Width	Height	Length			
HSUV-SS-40-1	40	8"	11"	38"	1-1/2" NPT	110-130 v / 50-60 hz	80
HSUV-SS-40-2	40	8"	11"	38"	1-1/2" NPT	200-250 v / 50-60 hz	80
HSUV-SS-65-1	65	10"	13"	38"	2" NPT	110-130 v / 50-60 hz	123
HSUV-SS-65-2	65	10"	13"	38"	2" NPT	200-250 v / 50-60 hz	123
HSUV-SS-100-1	100	10"	13"	38"	2" NPT	110-130 v / 50-60 hz	124
HSUV-SS-100-2	100	10"	13"	38"	2" NPT	200-250 v / 50-60 hz	124
HSUV-SS-225-1	225	10"	16-1/2"	68"	4" Flange	110-130 v / 50-60 hz	150
HSUV-SS-225-2	225	10"	16-1/2"	68"	4" Flange	200-250 v / 50-60 hz	150
HSUV-SS-400-2	400	18"	21"	68"	6" Flange	200-250 v / 50-60 hz	NA
HSUV-SS-600-2	600	20"	29-1/2"	68"	8" Flange	200-250 v / 50-60 hz	NA
HSUV-SS-800-2	800	25"	33"	68"	8" Flange	200-250 v / 50-60 hz	NA

Note: All systems rated for pressures to 125 PSI.

Hydro-Safe® UV Disinfection Systems

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Options for models with monitors

Part Number	Description	Size	Material	Electrical
HSMMSV-15-1	Solenoid valve for monitor models	1/2"	Brass	110
HSMMSV-15-2	Solenoid valve for monitor models	1/2"	Brass	220
HSMMSV-75-1	Solenoid valve for monitor models	3/4"	Brass	110
HSMMSV-75-2	Solenoid valve for monitor models	3/4"	Brass	220
HSMMSV-100-1	Solenoid valve for monitor models	1"	Brass	110
HSMMSV-100-2	Solenoid valve for monitor models	1"	Brass	220
HSMMSV-150-1	Solenoid valve for monitor models	1-1/2"	Brass	110
HSMMSV-150-2	Solenoid valve for monitor models	1-1/2"	Brass	220
HSMMSV-200-1	Solenoid valve for monitor models	2"	Brass	110
HSMMSV-200-2	Solenoid valve for monitor models	2"	Brass	220
HSMMC-1	Cable connects solenoid to monitor	5'		
HSMM-RM	Remote monitor shows intensity & time			
HSMM-FR-2	Flow restrictor set for 2 GPM	1/2" x 1/2" FNPT	Chrome	
HSMM-FR-5	Flow restrictor set for 5 GPM	3/4"x3/4" FNPT	Chrome	
HSMM-FR-8	Flow restrictor set for 8 GPM	3/4"x3/4" FNPT	Chrome	
HSMM-FR-12	Flow restrictor set for 12 GPM	1"x1" FNPT	Chrome	
HSMM-FR-20	Flow restrictor set for 20 GPM	1"x1" FNPT	Chrome	



Replacement lamps

Part Number	Flow Rate (GPM)	Length		Ship Wt. (Lbs.)
HSRL-9	0.5	9"	229 mm	1
HSRL-11	1	11-7/8"	302 mm	1
HSRL-13	2	13-1/2"	343 mm	1
HSRL-18	5	18-13/16"	479 mm	1
HSRL-32	8	32-1/2"	826 mm	1
HSRL-33	12 to 100	33-3/4"	857 mm	1
HSRL-61	225 to 800	61-7/8"	1,571 mm	1

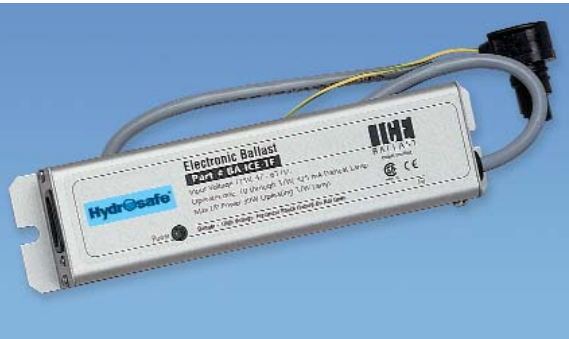
Note: Two o-rings are shipped with all replacement lamps.

Quartz sleeves

Part Number	Flow Rate (GPM)	Size	Material	Ship Wt. (Lbs.)
HSQS-9	0.5	20x22.5x254 mm	Quartz	1
HSQS-11	1	20x22.5x330 mm	Quartz	1
HSQS-13	2	20x22.5x375 mm	Quartz	1
HSQS-18	5	20x22.5x502 mm	Quartz	1
HSQS-32	8	20x22.5x845 mm	Quartz	1
HSQS-33	12 to 100	20.5x22x889 mm	Quartz	1
HSQS-61	225 to 800	22x25x1638 mm	Quartz	1

Hydro-Safe® UV Disinfection Systems

Replacement ballast and power cords.



Revolutionary ballast design

Our revolutionary ballast design provides the following significant advantages:

- Longer lamp life due to cooler operation
- Improved transient protection from electrical spikes
- Eliminates lamp flickering
- Audible & visual alarm if lamp fails
- Audible & visual alarm for lamp replacement (12 mos.)
- Conformal coated circuit board for condensation protection.

Electronic ballast

Part Number	Model Numbers	Type	Electrical (Lbs.)	Ship Wt.
HSEB-1F	HSUV-SS-05-1 HSUV-SS-1-1 HSUV-SS-2-1 HSUV-SS-5-1 HSUV-SS-8-1 HSUV-SS-12-1	Electronic	100 - 130v / 50-60 hz	2
HSEB-2F	HSUV-SS-05-2 HSUV-SS-1-2 HSUV-SS-2-2 HSUV-SS-5-2 HSUV-SS-8-2 HSUV-SS-12-2	Electronic	200 - 250v / 50-60 hz	2
HSEB-3F	HSUV-SS-M-5 HSUV-SS-M-8 HSUV-SS-M-12 HSUV-SS-M-24	Electronic	100 - 130v / 50-60 hz	2
HSEB-40/100-100	HSUV-SS-40-1 HSUV-SS-65-1 HSUV-SS-100-1	Electronic	100 - 130v / 50-60 hz	1
HSEB-40/100-200	HSUV-SS-40-2 HSUV-SS-65-2 HSUV-SS-100-2	Electronic	200 - 250v / 50-60 hz	1
HSEB-225/800-100	HSUV-SS-225-1 HSUV-SS-400-1 HSUV-SS-600-1 HSUV-SS-800-1	Electronic	100 - 130v / 50-60 hz	2
HSEB-225/800-200	HSUV-SS-225-2 HSUV-SS-400-2 HSUV-SS-600-2 HSUV-SS-800-2	Electronic	200 - 250v / 50-60 hz	2

Note: Detachable power cords sold separately.

Detachable power cords

Part Number	Description	Type	Ship Wt. (Lbs.)
HSDPC-NA	North American (NEMA 5-15P)	3-prong grounded (115V)	1
HSDPC-EU	European	2-pin	1
HSDPC-UK	UK	3-prong	1
HSDPC-A	Australian	3-prong	1

Plastic UV Systems

Disposable models and units with replaceable lamps for economy.



Model PUV-6W with replaceable lamp

Plastic UV systems with replaceable lamps

Model Number	Description	Fitting	Flow Rate	Electrical	Number Per Case
PUV-6W	Complete unit*	1/4" J.G.	1 GPM	6 Watts, 110V, 60 Hz.	25

*Includes ballast

Spare parts

Part Number	Description	Electrical	Number Per Case
PUV-BAL110	Ballast	6 Watts, 110V, 60 Hz.	1
PUV-RL-6W	Lamp	6 Watts, 110V, 60 Hz.	1



Disposable in-line uv systems

Low cost uv systems for residential applications.

Advantages

- Low cost
- Easy installation
- Reliable
- Flow rates from 0.5 to 2.0 GPM

Disposable in-line uv systems

Model Number	Dimensions	Fittings	Flow Rate (GPM)	Electrical	Number Per Case
UV4	2" x 10"	1/4" J.G.	0.5	4 Watts	25
UV6	2-1/2" x 10"	1/4" J.G.	1.0	6 Watts	25
UV8	2-1/2" x 10"	1/4" J.G.	2.0	8 Watts	25
UV24*	2" x 10"	1/4" J.G.	0.5	4 Watts	25
UV26*	2-1/2" x 10"	1/4" J.G.	1.0	6 Watts	25
UV28*	2-1/2" x 10"	1/4" J.G.	2.0	8 Watts	25

Spare parts for disposable in-line uv systems

Part Number	Description	No. / Case
UVBAL120	Ballast (U.S.)	25
UV2BAL*	Ballast (International)	25

*For international electrical requirements.