

UVCom Filter



The Pentair UVCom is a world class Commercial/Industrial ultraviolet disinfection system designed to solve a variety of water purification problems. UVCom offers high quality, energy efficient, easy to install, set up and service UV systems. Choose from 8 different models that fit your specific market or application needs.

APPLICATIONS

- Water and solution disinfection
- Pre-filter and / or post-filter for
 - Submicron filters
 - Resin and carbon beds
 - Reverse osmosis
 - Water storage tanks
- Water for food and beverages
 - Ingredient water for restaurants and bakeries
 - Soft drinks, water bottling and vending
 - Ice machines
 - Canning processes
 - Fruit and vegetable washing
 - Grocery misting
 - Water and syrups for juices, beer and wine
 - Dairies and cheese
- Hospitals, retirement communities, nursing homes, hotels and schools
 - Whole building water loops
 - Cooling tower make up and recirculation water
 - Humidification and misting
- High purity water loops and DI rinse water for laboratories, plating, electronics and automotive
- Small community water systems
- Farm water supplies
- Aquaculture / fish hatcheries
- Ozone destruction

FEATURES

- 16-90 mJ/cm² output depending on flow rate
- Energy efficient low pressure lamps with matching high frequency ballast
- Electro polished industrial grade 304 stainless steel reactor chamber
- Stainless steel nuts hold quartz tube and bulb in place
- 115V / 60 Hz or 230 / 50 Hz operation for easy installation
- Oversized inlet / outlet ports
- Includes mounting clamps, quartz tube, UV lamp and ballast
- 2 LED status indicators with audible alarm shows power to system and warn if UV lamp is not connected, not working or problem with ballast
- UL / CE Listed ballast

BENEFITS

- Efficient inactivation of bacteria, viruses, cysts, yeast and mold without the addition of chemicals
- Enhances the life of submicron filters, carbon and resin beds
- Improved microbiological purity of water in recirculation loops
- Destruction of ozone in high doses (>90mJ/cm²)
- Does not require transportation, storage and dispensing of hazardous chemicals which may also create harmful disinfection by-products
- Easy access for service and removal of components
- Adaptable for a wide range of water conditions depending on water flow
- Long and consistent trouble free operation with high quality and purity components
- UV bulbs produce the required UV dose throughout the 9,000 hour life
- Lower pressure drop
- UL / CE Listed ballast assures quality and safety of electrical system and components
- Warranty: 10 year limited warranty on stainless reactor; 1 year limited on UV lamp and 5 year prorated warranty on rest of system and all other components

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VARIOUS MICROORGANISMS REQUIRE DIFFERENT UV DOSES TO INACTIVATE THEM. SOME OF THE COMMON MICROORGANISMS AND THE UV DOSES REQUIRED TO INACTIVATE AND PREVENT THEM FROM REPRODUCING ARE:

Microorganism (log reduction)	Dose	Microorganism (log reduction)	Dose	Microorganism (log reduction)	Dose
Bacteria		Protozoa Cysts		Algae	
Bacillus anthracis (3 log)	8.7 mJ/cm ²	Cryptosporidium parvum (4 log)	<10 mJ/cm ²	Chlorella vulgaris 3 (log)	22 mJ/cm ²
Clostridium tetani (3 log)	22 mJ/cm ²	Giardia lamblia (4 log)	<10 mJ/cm ²	Yeast	
E. coli (4 log reduction)	6.6 mJ/cm ²	Viruses		Baker's yeast	8.8 mJ/cm ²
Legionella sp. (3 log)	2.9-5.5 mJ/cm ²	Hepatitis virus (3 log)	8 mJ/cm ²	Brewer's yeast	6.6 mJ/cm ²
Mycobacterium tuberculosis (3 log)	10 mJ/cm ²	Influenza virus (3 log)	6.6 mJ/cm ²	Saccharomyces sp.	17.6 mJ/cm ²
Pseudomonas aeruginosa (3 log)	10.5 mJ/cm ²	Poliovirus (3 log)	21 mJ/cm ²	<i>Note: UV energy shown in millijoules per square centimeter (mJ/cm²); 1 mJ/cm² = 1,000 uWsec/cm². A 5 micron or smaller prefilter before the UV system is required for proper operation. The quartz sleeve will need to be cleaned periodically, see owner's manual for more information.</i>	
Salmonella paratyphi (4 log)	6.1 mJ/cm ²	Rotavirus (3 log)	24 mJ/cm ²		
Shigella dysenteriae (4 log)	4.2 mJ/cm ²	Mold Spores			
Staphylococcus hemolyticus (3 log)	5.5 mJ/cm ²	Aspergillus flavus (3 log)	99 mJ/cm ²		
Vibrio cholerae (3 log)	6.5 mJ/cm ²	Penicillium roqueforti (3 log)	26.4 mJ/cm ²		

Model	UVCom 2	UVCom 6	UVCom 12	UVCom 24	UVCom 30	UVCom 45	UVCom 60	UVCom 75
Part Number	CM802001	CM802002	CM802003	CM802004	CM802005	CM802006	CM802007	CM802008
Inlet/Outlet: inches/(mm)	3/8" NPT/ (9.5)	1/2" NPT/ (12.7)	1" NPT/ (25.4)	1 1/4" NPT/ (32)	1 1/4" NPT/ (32)	1 1/2" NPT/ (38.1)	2" Flanged/ (50.8)	2" Flanged/ (50.8)
Shipping Weight: lbs. (Kg)	5.8 (2.6)	7.3 (3.3)	9 (4.1)	14 (6.4)	39 (18)	51 (23)	75 (34)	79 (36)
Maximum Operating Pressure: psi/ (Kg/cm ²)	125 (8.8)	125 (8.8)	125 (8.8)	125 (8.8)	125 (8.8)	125 (8.8)	125 (8.8)	125 (8.8)
Water Temperature: Min./Max. F°/C°	35-104/ (2-40)	35-104/ (2-40)	35-104/ (2-40)	35-104/ (2-40)	35-104/ (2-40)	35-104/ (2-40)	35-104/ (2-40)	35-104/ (2-40)
Lamp Type:	Low Pressure	Low Pressure	Low Pressure	Low Pressure	Low Pressure	Low Pressure	Low Pressure	Low Pressure
Visual Power Indicator:	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Lamp Failure Indicator:	Visual & Audible	Visual & Audible	Visual & Audible	Visual & Audible	Visual & Audible	Visual & Audible	Visual & Audible	Visual & Audible
Life of bulb in hours:	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000
Chamber material:	304 Electropolished SS	304 Electropolished SS	304 Electropolished SS	304 Electropolished SS	304 Electropolished SS	304 Electropolished SS	304 Electropolished SS	304 Electropolished SS
Flow Rate								
US Public Health - 16 mJ/cm ² : gpm/ (L/min)	3.75 (14.2)	11.25 (42.6)	22.5 (85.2)	45 (170)	56.25 (212)	84.2 (319)	112.5 (426)	140.6 (530)
30 mJ/cm ² : gpm/ (L/min)	2 (7.6)	6 (22.7)	12 (45.4)	24 (91)	30 (114)	45 (170)	60 (227)	75 (284)
NSF/EPA - 40 mJ/cm ² : gpm/ (L/min)	1.5 (5.7)	4.5 (17)	9 (34)	18 (68.1)	22.5 (85.1)	33.8 (127)	45 (170)	56.3 (213)
Destruction of Ozone -90 mJ/cm ² : gpm/ (L/min)	<.67 (2.5)	<2.0 (7.6)	<4.0 (15.1)	<8.0 (30)	<10 (37.8)	<15 (56.8)	<20 (75.6)	<25 (94.6)
Dimensions								
Complete Chamber: inches/(mm)	2.7 (69) x 14.6 (371)	3.2 (82) x 20.7 (526)	3.3 (84) x 39.1 (993)	4.2 (107) x 39.5 (1003)	9.1 (231) x 37.9 (963)	11.4 (290) x 37.9 (963)	13.4 (341) x 37.9 (963)	13.4 (341) x 37.9 (963)
Chamber: dia x length inches/(mm)	2.0 (51) x 12.8 (325)	2.5 (64) x 18.8 (478)	2.5 (64) x 37.9 (963)	3 (76) x 37.9 (963)	4 (102) x 35.5 (902)	6.25 (159) x 35.5 (902)	6.25 (159) x 35.5 (902)	6.25 (159) x 35.5 (902)
Ballast/ Control: inches/(mm)	2.7 (69) x 1.7 (44) x 5.3 (135)	2.7 (69) x 1.7 (44) x 5.3 (135)	2.7 (69) x 1.7 (44) x 5.3 (135)	2.7 (69) x 1.7 (44) x 8.4 (214)	7.9 (201) x 14.5 (369) x 19.1 (486)	7.9 (201) x 14.5 (369) x 19.1 (486)	7.9 (201) x 17 (432) x 20.9 (531)	7.9 (201) x 17 (432) x 20.9 (531)
Electrical								
Voltage: Volts/ Hz	115V/ 60 Hz or 230V/ 50 Hz*	115V/ 60 Hz or 230V/ 50 Hz*	115V/ 60 Hz or 230V/ 50 Hz*	115V/ 60 Hz or 230V/ 50 Hz*	115V/ 60 Hz or 230V/ 50 Hz*	115V/ 60 Hz or 230V/ 50 Hz*	115V/ 60 Hz or 230V/ 50 Hz*	115V/ 60 Hz or 230V/ 50 Hz*
Lamp Watts:	14	25	39	80	80 W x 2	80 W x 3	80 W x 4	80 W x 5
Water quality requirements:	Total Iron <0.3 ppm, Manganese <0.05 ppm Hydrogen sulfide <0.05 ppm, Turbidity < 1 NTU, Suspended solids < 10 ppm, Hardness less than 7 grains per gallon (gpg), Tannins <0.1 ppm, UV transmittance > 75%							

Note: System performance and specifications based on feed water of 750 Mg/L NaCl at 77°F (25°C) at 75% recovery and 60 psi (4.2 Kg/cm²) dynamic pressure to the inlet of the system.
* Request new part number