microlene

UV

Ultra Violet Standard Output (SO) Water Disinfection Systems

Model Number: UV24, UV57, UV80

UV24 UV57 UV80

Applications

Domestic UV water disinfection systems are a safe and effective means of eliminating harmful bacteria from drinking water supplies. They can also be used for small scale waste water disinfection at reduced flow rates.

- No chemicals
- No taste
- No by-products
- Impossible to overdose

Benefits of Microlene's UV Water Disinfection Systems

UV is a common practice used for water disinfection on a wide range of water sources. Used by many local councils, food, dairy and brewing industries, UV is a very effective means of ensuring water is safe for consumption.

The UV light generated by the lamp in a Microlene UV disinfection unit penetrates most micro-organisms present in the water supply, damaging their ability to reproduce and cause illness. Organisms exposed to UV are no longer viable to cause infection nor can they be counted on a culture plate.

Water treated by the Microlene UV systems should be very clean and free of particulate matter. This can be achieved by incorporating two stage pre-filtration down to one micron if used for drinking water supplies. Cysts such as Giardia and Cryptosporidium are best managed using this pre-filtration and disinfection process.

The Microlene UV systems are designed to provide many years of reliable operation at an economical price. Suitable for potable water and food industry use, all wetted components are also USFDA listed.

Microlene UV Systems are designed for continuous operation treating water up to 40°C. Provided the chamber is full of water, the unit can handle flows from zero up to the design flow rate, based on very good water clarity. If water clarity cannot be improved, flow should be reduced accordingly or a larger flow UV model selected.

The L shaped chamber design offers improved water flow characteristics and is manufactured from 304 stainless steel for cleanliness and durability, handling water pressures up to 860kPa.

The Microlene UV systems can be installed horizontally or vertically and pipework should ensure that the chamber stays full of water. If horizontal, the outlet should point upwards, if vertical the outlet should point horizontally. Mounting brackets are provided for easy installation.

Pre-treatment (drinking water)

Pre-filtration is normally required to ensure particles do not shield micro-organisms from the UV light. Minimum sand filtration or 20 micron cartridge filtration is preferred. If cysts like Giardia or Cryptosporidium are present 1 micron filtration is required for drinking water taps.

Product Features

- Now available with integral lamp life monitor, with both audible and visual indication of lamp life
- Axial flow, 304 stainless steel polished chambers
- Visual sight port for "lamp-on" verification
- Designed & manufactured to ASME pressure vessel standards
- Flow rates stated at 95% UVT at a dose of 30mJ/cm2
- True gland seal retaining nut with positive stop
- User friendly bayonet style lamp connector (quick ¼ turn removal with no extra tools needed)
- Reliable, industry proven, proprietary low pressure (LP) coated UV lamps with ceramic bases for durability and long life (9,000 hours)
- Constant current electronic controller (one controller for all systems) in a splash proof case, fully potted ballast virtually eliminates common water damage issue
- Audible & visual lamp failure indicators
- Tactile selector button

Technical data on following page >

Microlene UV Disinfection Systems

SPECIFICATIONS			
Model	**UV24**	**UV57**	**UV80**
Flow Rate 16mJ/cm² @ 95% UVT	41 lpm	110 lpm	150 lpm
	11 gpm	30 gpm	39 gpm
	2.5 m³/hr	6.8 m³/hr	8.9 m³/hr
Flow Rate 30mJ/cm² @ 95% UVT	23 lpm	57 lpm	79 lpm
	5.8 gpm	15 gpm	21 gpm
	1.3 m³/hr	3.4 m³/hr	4.8 m³/hr
Flow Rate 40mJ/cm² @ 95% UVT	17 lpm	45 lpm	59 lpm
	4.4 gpm	12 gpm	16 gpm
	1.0 m³/hr	2.7 m³/hr	3.6 m³/hr
Port Size	¾"MNPT	1"MNPT	1"MNPT
Electrical	90-265V/50-60Hz. 1A Max.		
Plug Type	Australian/New Zealand, AS/NZ 3112, 3-wire for all 230V (MC-CONT-PC)		
Lamp Power (Watts)	22	50	42
Power (Watts)	30	62	51
Replacement Lamp	UV24LAMP	UV57LAMP	UV80LAMP
Replacement Sleeve	UV24SLEEVE	UV57SLEEVE	UV80SLEEVE
Chamber Dimensions	6.4 x 54.2 cm (2.5 x 21.3")	6.4 x 101.6 cm (2.5 x 40.0")	8.9 x 91.7 cm (3.5 x 36.1")
Chamber Material	304 Stainless Steel, A249 Pressure Rated Tubing		
Controller Dimensions	17.2 x 9.2 x 10.2 cm (6.8 x 3.6 x 4")		
Operating Pressure	69 - 860 kPa (10 - 125 psi)		
Operating Water Temperature	2-40° C (36-104° F)		
UV Monitor	Available only on the upgraded controller UVCXS-CONT (purchased separately)		
Solenoid Output	Optional upgrade **DMMOD-SOL1**, only compatible when used with upgraded controller UVCXS-CONT (purchased separately)		
Dry Contacts	Optional upgrade **DMMOD-RAM**, only compatible when used with upgraded controller UVCXS-CONT (purchased separately)		
4-20mA Output	Optional upgrade **DMMOD-420**, only compatible when used with upgraded controller UVCXS-CONT (purchased separately)		
Temperature Mgmt. Valve	PN# DM130032	PN# DM130033	
Cooling Fan	NO		OPTIONAL (DM130014 sold separately)
Lamp Change Reminder	YES		
Lamp Out Indicator	YES		
Shipping Weight	4.4 kg (9.6 lbs)	6.5 kg (14.4 lbs)	8.2 kg (18.0 lbs)

Conditions For Use

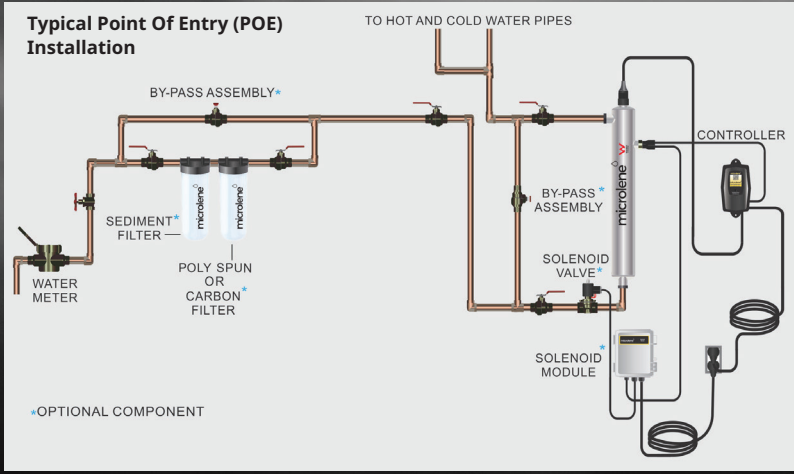
Your system will provide years of use provided the system is maintained on a regular basis as per the specifications outlined in the Installation & Operating Instructions. For the following system to perform as tested, the following water quality parameters must be met.

Parameter	Level
Hardness	< 120 mg/L (120 ppm)
Iron (Fe)	< 0.3 mg/L (ppm)
Manganese (Mn)	< 0.05 mg/L (ppm)
Tannins	< 0.1 mg/L (ppm)
Turbidity	< 1 NTU
Transmittance	> 75% UVT

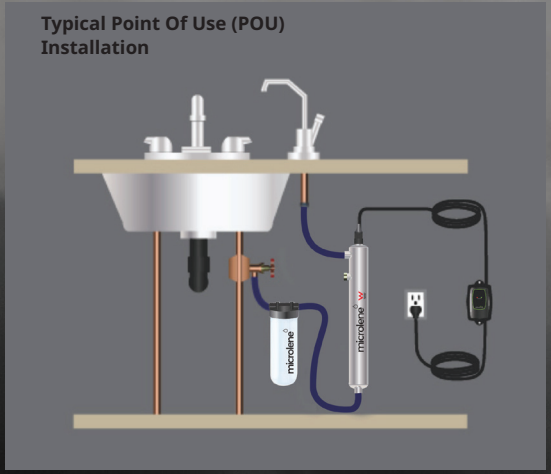
Warranty

Chambers	Ten (10) year Limited Warranty
Electronics	Three (3) year Limited Warranty
UV Lamps	One (1) year Limited Warranty
Quartz Sleeves	One (1) year Limited Warranty

Typical Point Of Entry (POE) Installation



Typical Point Of Use (POU) Installation



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