



Centurion Smart Wall mounted UV System MCS

Applications

- Filtration and disinfection of rainwater
- Small and medium home potable water supply
- Bore and surface water – subject to water quality

Best warranty on the market:

10 years on stainless reactor chamber

3 years on electronic controller

14 months on UV lamps and UV sensors

Microlene's Centurion Smart UV System

Microlene's proven three-stage filtration and ultraviolet disinfection systems can provide continuous clean, safe and fresh tasting water from your rainwater tank.

In conjunction with pre-filtration, UV is the best practical option for treating drinking water and is widely used in disinfecting the drinking supplies of not just individual homes, but entire towns.

Installation of a UV system has never been easier with an innovative design that allows for feedwater to enter the filters from either the left or right side of the unit.

Simplistic in operation, this system features a tricolor LED that indicates system status and a 4-digit display to indicate lamp life remaining. Pressing the button will change the display to indicate total running time. When the UV lamp is on and within its operating age, the LED will be green. When the UV lamp is not on or the lamp life has expired, the LED will be illuminated red and an audible buzzer will be sounding. To remedy this condition, the UV lamp must be replaced with a new genuine Microlene UV lamp.

Controller Information and Diagnostics – Sample Screens



Centurion S features:

- Filter design with O-ring groove for fail-safe installation
- Higher operating pressure (120 psi), and single manifold heads (no potential leaks between heads)
- Tricolor LED display that indicates system status and a 4-digit display to indicate lamp life remaining
- 316L stainless steel, axial flow reactors allow for optimum efficiency & lamp and sleeve service without the need to drain the water
- Coated UV lamps for consistent UV output throughout life
- 10,000 hour LP lamps – longest residential lamp life on the market
- The active system can be mounted in under 5 minutes
- 10-year limited warranty on UV reactors
- Splash-proof controller with constant current electronic ballast

*Note: Cannot treat water contaminated by metals, chemicals or algal toxins.

Microlene Centurion S

Maximum flow rate	57 lpm
Maximum system pressure	700 kPa
Water temperature range	5 – 40°C
Maximum ambient temperature	50°C
Lamp life	10,000 hrs (14months)

Supply Voltage	90-265VAC
Supply frequency	50-60Hz
Power	57W
Phase	1
Lamp	45W
Input	0.24A
Output	800mA

Service Intervals	
UV lamp	Replace 14 months
UV quartz sleeve	Clean 2 – 6 months

Water Quality
Water quality is extremely important for optimum UV performance. Maximum recommended parameters are as follows:

Materials of Construction	
Part	Material
Chamber	Polished 316L Stainless Steel A249 pressure rated tubing
Wall mounting bracket	Powder coated steel

Hardness	120 mg/L – if hardness level is 120 mg/l or slightly below the quartz sleeve must be cleaned periodically in order to ensure efficient UV penetration; if above the water must be softened.
Iron (Fe)	<0.3 ppm (0.3mg/l)
Manganese (Mn)	<0.05 ppm (0.05mg/l)
Turbidity	<1 NTU
Tannins (organics)	<0.1 ppm (0.1mg/l)
UVT (transmittance)	>85% (Please contact Microlene if water has a UVT that is less than 80% for pre-treatment recommendations)

Spare parts & options	
Part code	Description
KMCS	Complete unit
20PP20J	Poly pleated 20 microns rated cartridge (housing 1)
1PS20J	Poly spun 1 micron rated cartridge (housing 2)
MC-HOLP	High output UV lamp
MC-HOSL	Quartz sleeve
MCS-CONT	MCS controller
MC-CONT-PC	Controller power cord

UV DISINFECTION SYSTEMS		
MODEL	MCXS	MCS
Flow Rate (@ 16 mJ/cm ² @ 95% UVT)	114 lpm	114 lpm
Flow Rate (@ 30 mJ/cm ² @ 95% UVT)	57 lpm	57 lpm
Flow Rate (@ 40 mJ/cm ² @ 95% UVT)	45 lpm	45 lpm

NOTE: Flow rates are based on flow velocity of 8.2 ft/sec (2.5 m/sec.), flow rate limited to 84 lpm for 1" port before significant pressure drop is realized

- NOTES:
 1. INLET PORT: 1" FEMALE-NPT.
 2. OUTLET PORT: 1" MALE-NPT.
 3. REFERENCE DIMENSIONS IN ROUND () BRACKETS.

