



Centurion Xtra Smart Wall mounted 3 Stage UV system

Model Number: MCXS and KMCXS

Applications

Filtration and disinfection of:

- Rainwater
- Bore or surface water – subject to water quality

Suits small to medium home's potable water supply

Industry leading warranty:

- 10 years on stainless UV chamber
- 3 years on electronic controller
- 14 months on UV lamps and UV sensors
- 12 months on filter housings

Microlene's Centurion Xtra Smart 3 Stage UV System

Microlene's proven three-stage filtration and ultraviolet disinfection systems can provide continuous clean and safe water from your rainwater tanks. Note: Microlene disinfection systems cannot remove dissolved metals, chemicals or toxins from the water. Additional treatment is required for these contaminants.

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 right or left side of the unit. The new Centurion XS is "factory ready" to accept a UV intensity module in the future if so desired. The plug and play platform has the most advanced residential controller on the market with a colour user interface giving a multitude of screens displaying diagnostics, status, warnings and even QR codes for a quick link back to Microlene's website.

Centurion MCXS features:

- Special filter design with O-ring groove for fail-safe installation
- High maximum operating pressure 827kPa (120 psi), and single manifold heads (no potential leaks between heads)
- Xtra Smart controller with a multitude of screens displaying diagnostics, status, warnings and even QR codes for a link to replacement parts
- NEW controller with keyed technology ensuring only the correct lamps can be used in the system

- 316L stainless steel, axial flow chambers allow for optimum efficiency plus 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 lamplife on the market
- Ready for quick installation and use
- 10 year limited warranty on UV chambers
- Splash-proof controller with constant current electronic ballast designed to IP54 ingress protection rating

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

Models

MCXS: Includes MCXS 3 Stage UV System only (no cartridges) only available in NZ

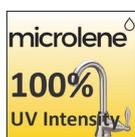
KMCXS: includes MCXS plus 20 micron poly pleated cartridge and 1 micron polyspun cartridge

KMCXS-TK: Part number for picking kit

AU includes KMCXS Carton x1 (with Cartridges) and MCS-C Carton x1

NZ each item in its own packaging MCXS x1, 20PP20J x1, 1PS20J x1 & MSC-C x1

Controller Information and Diagnostics - Sample Screens



Microlene Centurion Xtra Smart

Operating Limits

Flow Rates (subject to dosage, UVT and demand %UVT)	<p>Recommended 56.8 l/min @ 30mj</p> <p>As a general guide, most households do not exceed 50 lpm demand at the same time.</p> <p>For example, 3 outlets turned on at the same time at an average flow rate of 9.3 lpm creates a demand of 27.9 lpm (this flow rate through the chamber will in fact increase the mJ UV dosage rate being applied to and treating the water) at this flow rate the water will in fact be treated at 61mj @ 95% UVT which is over double the industry recommended 30mj rating.</p>
Maximum system pressure	827kPa (120 PSI)
Water temperature range	0 – 40°C
Maximum ambient temperature	50°C
Lamp life	10,000 hrs (14 months)

Service Intervals

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

Materials of Construction

Part	Material
Chamber	Polished 316L Stainless Steel A249 pressure rated tubing
Wall mounting bracket	Powder coated steel
Chamber connections	1" Male NPT (AU supplied KMCXS has BSP adaptor included)
Filter Housing connections	1" Female NPT (AU supplied KMCXS has a 1" NPT to 1" BSP male nipple included for incoming pipework)

Spare Parts & Options

Part code	Description
MCS-C	Cover
KMCXS	Complete unit with filter cartridges
20PP20J	Poly pleated 20 microns rated cartridge (housing 1)
1PS20J	Poly spun 1 micron rated cartridge (housing 2)
MC-HOLP	High output UV lamp (O-ring included)
MC-HOSL	Quartz sleeve (O-ring included)
MCXS-CONT	MCXS controller
MC-CONT-PC	Controller power cord - IEC x AUS/NZ 3 Pin male
MCXS-UVS	Optional UV sensor
DM130033	Temperature Relief Valve - Thermal bleed valve activates when water temperature exceeds 32-35°C
DMMOD-SOL1	Solenoid Module
DMMOD-420	4-20 mA module
DMMOD-RAM	Remote alarm module
DM160018	Replacement Dual Cap and twin housing assembly
DM310177	Filter housing replacement O-Ring
WFH45	Replacement spanner
DM310039	Replacement sleeve spring

Electrical Data

Supply Voltage	90-265V ~
Supply frequency	50-60Hz
Power (Total)	57W
Phase	1
Lamp	45W
Max input current	0.24A
Max output current	800mA

Water Quality

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

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)	<0.5 ppm (0.5mg/l)
Turbidity	<1 NTU
Tannins (organics)	<0.1 ppm (0.1mg/l)
UVT (transmittance)	>85% (Please contact Davey if water has a UVT that is less than 80% for pre-treatment recommendations)

UV Disinfection Systems

Model	MCS/MCXS
Flow Rate (@ 16 mJ/cm² @ 95% UVT)	114 L/min
Flow Rate (@24.2 mJ/cm² @ 95% UVT)	70 l/min
Flow Rate (@ 30 mJ/cm² @ 95% UVT)	56.8 L/min
Flow Rate (@ 40 mJ/cm² @ 95% UVT)	45.4 L/min

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



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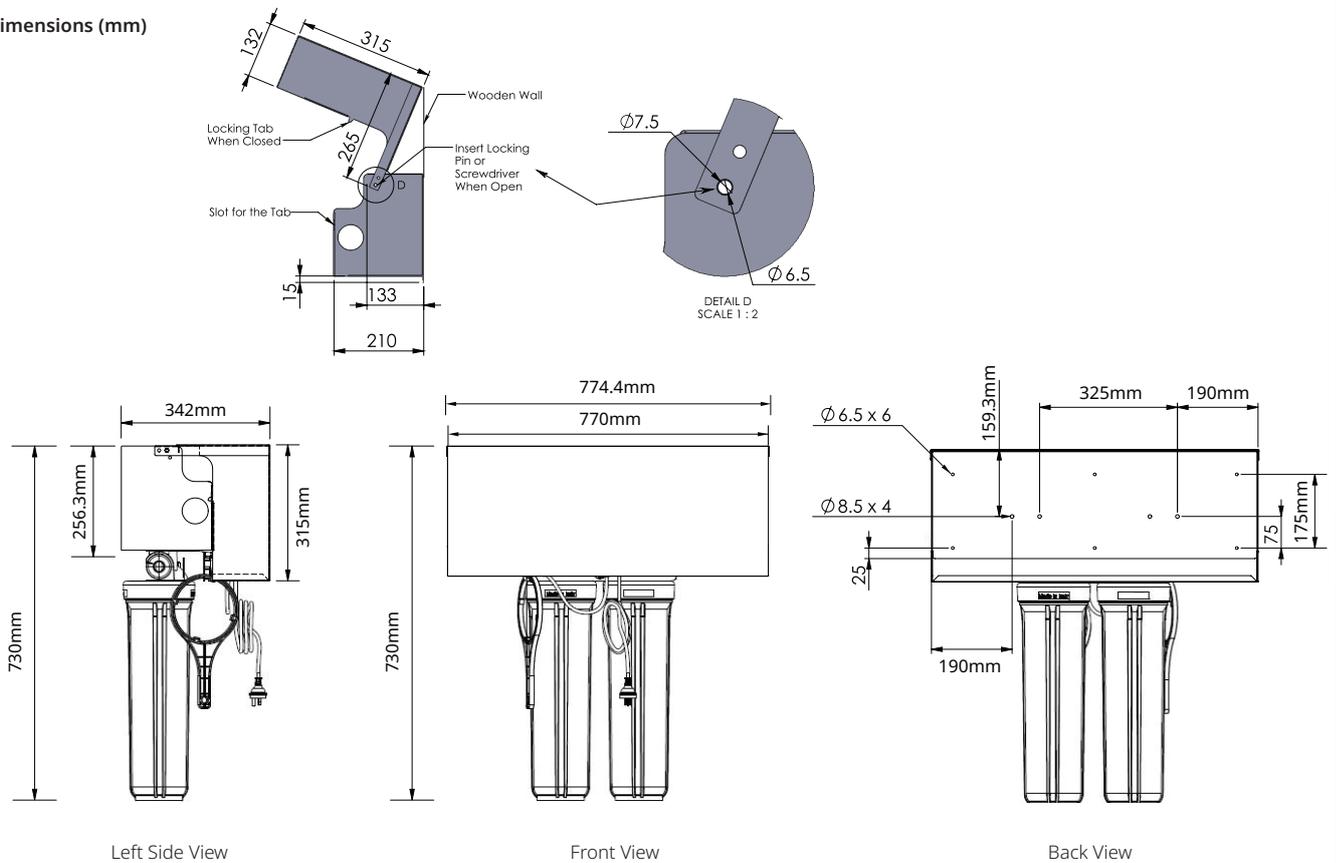
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Optional Cover for outdoor installation MCS-C

- Protects the chamber and controller from rain and direct elements for outdoor installations
- Enables the 3 Stage UV system to be set up left to right or right to left for ease of installation
- Mounting holes are aligned with the UV rack MCS and MCXS for ease of installation
- Insert locking pin or screwdriver to lock cover open during servicing
- Lamp change through side of the cover holes, no disassembling of cover required
- Made from 1.2mm zinc-titanium laminate zintek®
- Powdercoated with matt satin black finish
- Locking holes on either side 9mm x 7mm for applying a pad lock (not supplied) to prevent unauthorised access or tampering with the controller
- Elbow required during install to direct the outgoing water through the side cover holes (included in AU supplied KMCS/KMCXS units).

Dimensions (mm)



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This literature is not a complete guide to product usage. All images provided in this document are for illustration purposes only. Further information is available from your Davey Dealer, Davey Support Centre and from the relevant product Installation and Operating Instructions. Must be read in conjunction with the relevant product Installation and Operating Instructions and all applicable statutory requirements. Product specifications may change without notice. © Davey and Microlene are registered trademarks of Davey Water Products Pty Ltd. © Davey Water Products Pty Ltd 2021.