

UV Filtration System

WSC4N



**NSF55 & 42 Certified
Complies with NZDWS**



Connections	40mm / 1.5"
Flowrate	110 Lpm @ 125psiG
Dosage	40 mJcm ² / 70% UVT
Filtration	1000 m ³ cartridge life
Feed Water	Min 1°C (33°F) Max 25°C (77°F)
Weight	73 kg dry

General overview

- Designed for **high flow** locations, typically reticulated with 40mm piping
- **Certified NSF 55 Class A** dosage to always exceed 40 mJcm²
- **Certified NSF 42 for Chlorine Taste & Odor**. Chlorine reduction from 2.0 mg/L to 0.48 mg/L at 1,000 m³

Annual Service Kit (WSC4NSK) containing:

- WSI-100-1000-T5L qty 2 (100w 800mA UV Lamp)
- WSI-T5S qty 2 (1 set of Silicon Wedge Seals - replace after cleaning quartz sleeve)
- WSI-T5B qty 2 (1 set of Nylon Spacer Rings – allows end caps to smoothly tighten against the seals)
- WSI-PPC-45-2001 qty 1 (Jumbo 20" 1m Meltblown cartridge)
- WSI-KXG-45-2005 qty 3 (Jumbo 20" 5m Carbon cartridge)

***Hang on its 3 x SS brackets, connect to the inlet /outlet and plug in.
Simplicity at its best***

Major features include:

- **Filters:** 100% Stainless Steel for superior life at the higher pressures available on commercial ring mains
- **UV Chamber:** Extended length double welded internally polished twin lamp chamber
- **Connections:** UV Chamber via SS 1.5" Unions: Filters via Oring Spigots
- **Sealing:** All connections sealed with either 3.2mm N90 Nitrile washers or Nitrile Orings
- **Assembly** All Stainless Steel frame that is fully adjustable for aligning to inlet/outlet piping

Compliance to NZ Drinking Water Standards Tables 5.6 & 10.1

- Rigid 5m final cartridge– **Complies** – Carbon 5 micron fitted as **Standard**
- Continuous alarm monitoring lamp life & outage– **Complies** - Digital controller fitted as **Standard**
- UV Sensor low light alarm– **Complies** – Sensor Ballast & Sensor fitted as **Standard**
- Dosage to always exceed 40 mJ/cm² @ 70% UVT– **Complies** – Flow Control Orifice fitted as **Standard**



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Specifications

- Quartz Sleeves (2) : 930 x 23 mm (T5)
- Lamps (2): Powerful Hi Output 100 watt UV sterilizing lamp (extended length at 1000mm) 365-daylife to safeguard against water borne diseases, bacteria, E. coli, Giardia and Crypto.
- Power Supplies: Gel filled UV Sensored ballast /controller + Gel Filled Ballast each encased in IP rated boxes to protect from all forms of moisture, includes a built in RCBO and Surge Protector. RCM Licensed
- Filtration: Four 20" Jumbo Filters
- Piping: 304SS pipe fittings& Unions and UV chamber; 1.5" BSP connections (F);
- Mounting: Stainless Steel Frame; System Dimensions 1200 x 840 x 270 mm
- Shipping Carton: 1.4 x 0.9 x 0.4 (0.5 m3); 80.6kg

Typical Installation

- Do not mount close to the ground – chest height is recommended
- Systems should not be installed outside even with a cover in freezing conditions
- Fix the three SS brackets to studs, then hang the system onto the brackets
- Inlet and outlet pipes connect to the 1½" (F) ball valves
- Ideally position system with 1.1 meter clearance to the left (for removal of the lamp/quartz sleeve)
- If this is not possible, the chamber itself can be easily removed & refitted (Hex Unions)

Maintenance

- 6 monthly for replacing cartridges. If cartridges prematurely block then pre-filtration may be required.
- 12 monthly for replacing UV lamps & removal/cleaning of the quartz sleeves; replace seals.
- End of Lamp life signaled by digital countdown display (then alarm) at 12 months usage.

Warranty

- We warrant the ultraviolet disinfection and filtration system's hardware and electrical systems to be free from defects in material and workmanship for a period of three (3) years from the date of purchase (invoice date) by the original owner (consumer).
- The ultraviolet lamps and sensor probes to be free from defects in material and workmanship for a period of 10000 hours (1 year).
- We will at our option and expense, either repair or replace such items subject to certain conditions, exceptions, and exclusions as detailed in the System Manual.



Do not use the System with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

If this System is to be used for the treatment of untreated surface waters or ground water under the direct influence of surface water, a device found to be in accordance with Cyst Reduction under the appropriate NSF/ANSI Standard shall be installed upstream of the System.

Water passed through the unit must fall within the following parameters:

- Iron: < 0.3 ppm (0.3mg/L)
- Hardness* :< 7 gpg (120 mg/L)
- Turbidity: <5 NTU
- Manganese: < 0.05 ppm (0.05 mg/L)
- Tannins: < 0.1 ppm (0.3 mg/L)
- UV Transmittance: > 75% (call factory for recommendations on applications where UVT < 75%)



This System has been tested and certified by NSF International against NSF/ANSI Standard 42 for the reduction of Chlorine/Taste/Odor and NSF/ANSI Standard 55 for Class A Disinfection Performance.

NSF/ANSI 42

- The concentration of Chlorine in water entering the System was reduced to a concentration less than or equal to the permissible limit for water leaving the System, as specified in NSF/ANSI 42
- The System conforms to NSF/ANSI 42 for specific performance claims that are not listed in Tables 8.1 and 8.2 as verified and substantiated by test data.

NSF/ANSI 55

- This Class A System conforms to NSF/ANSI 55 for the disinfection of microbiologically contaminated water that meets all other Public Health standards. The System is not intended to convert waste water or raw sewage into drinking water. The System is intended to be installed on visually clear water.
- NSF/ANSI 55 defines wastewater to include human and/or animal body waste, toilet paper, and any other material intended to be deposited in a receptacle designed to receive urine and/or feces (blackwaste), and other waste materials deposited in plumbing fixtures (greywaste).

NSF Testing

- While NSF testing was performed under standard laboratory conditions, actual performance may vary.

End

Page 3 of 3