

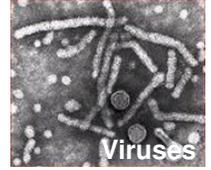
# R519/R830/R1245

## Whole House Ultraviolet (UV) Water Disinfection Systems



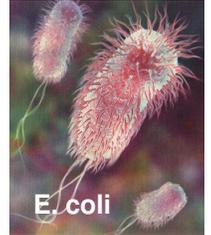
### How safe is your water?

Bacteria and viruses can affect all water supplies, especially ground and surface water sources like wells, springs, rivers, cisterns and lakes. It is estimated that 20 to 40% of wells in any area can be contaminated with disease-causing micro-organisms. Even some municipally-treated water is not fail-safe. Every year many municipalities across Canada issue *Boil Water Advisories*.



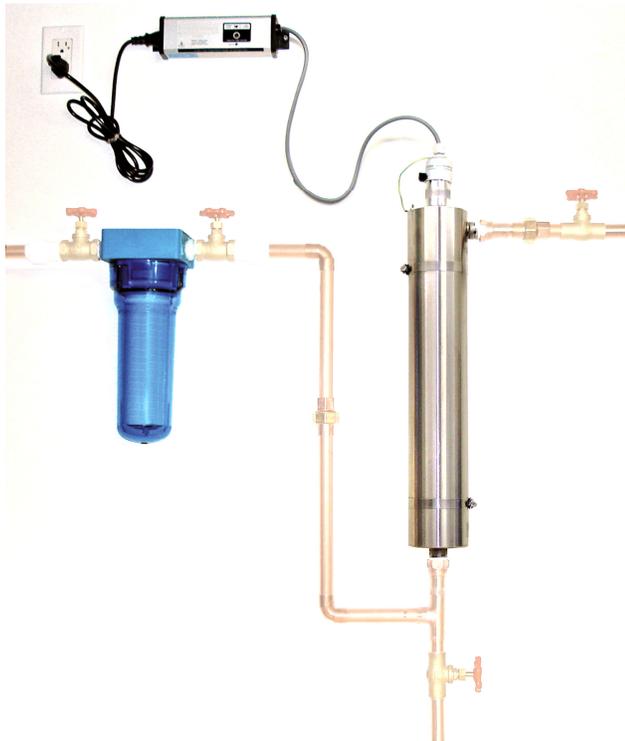
### What can happen if the water supply is contaminated?

Consumption of water that is contaminated with water-borne bacteria (like *E. coli*) and viruses can cause illnesses like diarrhea, dysentery, meningitis, hepatitis, etc.



### How can Rainfresh Whole-House UV System protect my family?

Rainfresh UV Systems are highly effective, non-chemical and environmentally friendly way of disinfecting water and ensuring safe water for your family. Germicidal ultraviolet light (UV) is created by a special high-output UV lamp inside a quartz sleeve, placed in stainless steel housing. As the water flows through the UV housing, it is subjected to a lethal dose of germicidal UV light ( $>40 \text{ mJ/cm}^2$ ) that instantaneously inactivates bacteria and viruses by destroying their DNA structure and thus making the water microbiologically safe to drink. The result is a simple, cost effective way of treating water for the entire house!



### FEATURES

**Highly Effective!** Rainfresh UV Systems are highly effective against water-borne bacteria like *E. coli*, parasites and viruses.

**Treats water for whole-house!** All the water in the house, hot & cold, is disinfected. Even water in your washrooms, kitchen and laundry!

**Chemical-Free!** Disinfection is achieved by a safe, natural, non-chemical process that does not alter the composition of the water or affect the taste & odour.

**Compact Design!** Rainfresh UV Systems are compact and extremely easy to plumb in, one of the most compact UV systems in the industry.

**High Output UV Lamps!** All Rainfresh UV systems incorporate high-output germicidal UV lamps for maximum UV energy.

### Efficient Controller!

Rainfresh UV systems are driven by highly efficient microprocessor-controlled ballast. It maintains UV output regardless of voltage or frequency variations. Due to it's energy efficient design, it uses as little energy as a single light bulb.

### Automatic Lamp Replacement Reminder!

After one year of service, the ballast sets off an audible and visual reminder, notifying you to replace the lamp.

### Easy to Maintain!

Regular maintenance is extremely simple and can be performed in minutes without tools.



# R519/R830/R1245

## Ultraviolet Water Disinfection Systems



### SPECIFICATIONS

MODEL #	R519	R830, R830F	R1245
Suitable for home with	Up to 2 bathrooms	2 to 3.5 bathrooms	Up to 4.5 bathrooms
Maximum flow rate	5 GPM / 19 LPM	8 GPM / 30 LPM	12 GPM / 45 LPM
UV Dose at rated flow	> 40 mJ/cm <sup>2</sup>		
AC supply voltage	120V, 50/60Hz, 0.7A		
Total power	27 Watt	40 Watt	62 Watt
Lamp power	25 Watt	38 Watt	60 Watt
Lamp service life	9000 hours		
Annual lamp change timer		Yes	
Lamp-ON Indicator	Yes		
Audio/Visual alarms	Yes		
Lamp change grace period	28 days maximum		
Grace period audio alarm disable	Yes (7 day)		
Reactor chamber material	Stainless Steel 304		
Inlet/Outlet port size	¾" MNPT		
Chamber dimensions (L x D)	16" x 3.5"	19" x 3.5"	31.4" x 3.5"
Controller dimensions (L x D x W)	5.15" x 1.7" x 2.2"	7" x 1.7" x 2.3"	
Maximum operating pressure	100 psi		
Maximum ambient temperature	50°C (122°F)		
Water temperature range	4 - 37°C (40-99°F)		

For optimum performance of the system, water entering the Rainfresh UV System should meet the following parameters: Hardness < 7.0 gpg (120 ppm); Iron < 0.3 ppm; Manganese < 0.05 ppm; Turbidity < 1 NTU; Tannins/Colour: None; UV Transmissivity > 85%

### TYPICAL INSTALLATION

Rainfresh UV Systems are installed as the final stage of treatment (such as after softener or iron filter etc.), just before the plumbing line divides into hot and cold lines.



Drinking Water

### CERTIFICATION

Rainfresh UV Systems are tested and certified by CSA International to CSA B483.1 and to NSF/ANSI 61 for material and structural requirements

UV dose performance validated by independent laboratory

### WARRANTY

Following are the warranties against defects in materials &/or workmanship.

**7 Years** – Stainless steel chamber

**1 Year** - Miscellaneous hardware, seals and ballast.

**6 months** – UV lamp. See warranty card for details



R1245 Installed



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### ENVIROGARD PRODUCTS LIMITED

446 Major Mackenzie Drive East,  
Richmond Hill, ON L4C 1J2 CANADA  
Tel: 905 884 9388 Toll Free: 1 800 667 8072  
Web: www.rainfresh.ca