



## Puretec Radfire<sup>®</sup> RI-37K

A feature-laden industrial UV system 322-632  
litres per minute

Puretec Radfire Systems meet the same stringent global performance standards as NSF/ANSI 55 Class A systems, without the associated high-cost that typically accompanies these systems.

If microbiological protection is required for your commercial/industrial application, then Puretec has the solution in the Radfire RI series of ultraviolet disinfection systems. Unsure about needing a UV sensor or if regulations require you to add a sensor, there is no need to replace the entire system... simply add a UV sensor module to the Radfire RI reactor as it comes with an integral sensor port built-in! Plug the optional UV sensor into the pre-wired controller and the UV intensity will be displayed on the LED output.

Constructed with highly polished 316L stainless steel reactors and industrial grade enclosures, Radfire RI uses proven low pressure amalgam (LP-AM) lamp technology offering stable output in both hot and cold water applications. Whether you are looking to control microbiological (bacteria & virus) issues in both hot or cold water with UVT levels as low as 50% or to reduce TOC in industrial grade waters, Radfire has you covered. Covering a wide variety of applications in both regulated and unregulated markets, Radfire offers environmentally friendly disinfection at lower capital and operating costs than traditional disinfection solutions.

### Product Features

- 316L stainless steel, polished reactors, with integral sensor port to allow for sensor upgradeability in the future (comes standard with visual glow plug)
- Constant current electronic controller in a splash-proof (IP-54) case with audible and visual lamp failure indicators Modular control panel with LED display for remaining lamp life, total running hours, audible & visual lamp failure, remote on and solenoid ready
- Designed & manufactured to ASME pressure vessel standards
- Reliable, industry proven low pressure amalgam (LP-AM) coated UV lamps with ceramic bases for durability, 12,000 hour lamp life
- Uniform lamp output in both hot or cold applications
- Flexible vertical or horizontal installation
- User friendly bayonet style lamp connector (quick ¼ turn removal with no extra tools needed)
- True gland seal retaining nut with positive stop.

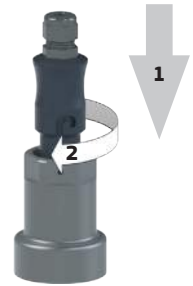


## Technical Specifications

Model	RI-37K
Normal Flow Rate 30 mJ/cm <sup>2</sup> @ 95% UVT	<b>85 GPM</b> <b>322 Lpm</b>
Hot Water Flow Rate 30 mJ/cm <sup>2</sup> @ 75% UVT	<b>60 GPM</b> <b>227 Lpm</b>
LOW UVT Flow Rate 30 mJ/cm <sup>2</sup> @ 50% UVT	<b>35 GPM</b> <b>133 Lpm</b>
TOC Flow Rate 150 mJ/cm <sup>2</sup> @ 95% UVT	<b>17 GPM</b> <b>64 Lpm</b>
Alt. flow-US Public Health 16 mJ/cm <sup>2</sup> @ 95% UVT	<b>167 GPM</b> <b>632 Lpm</b>
Alternate flow-NSF/EPA 40 mJ/cm <sup>2</sup> @ 95% UVT	<b>67 GPM</b> <b>252 Lpm</b>
Port Size	<b>2"</b>
Electrical	<b>230V/50-60Hz</b>
Plug Type	<b>Australian AS/NZ 3112, 3-wire for all 230V</b>
Lamp (Watts)	<b>207</b>
Power (Watts)	<b>220</b>
Replacement Lamp	<b>RL37K</b>
Replacement Sleeve	<b>RQ37K</b>
Chamber Material	<b>316L Stainless Steel, A249 Pressure Rated Tubing, Polished &amp; Passivated</b>
Reactor Dimensions	<b>4 x 46.8 x 5.6" (10 x 119 x 14 cm)</b>
Controller Dimensions	<b>11.8 x 7.9 x 6.3" (30 x 20 x 16 cm)</b>
Maximum Operating Pressure	<b>10.3 bar (150 psi)</b>
Operating Temperature Range	<b>2-60° C (36-148° F)</b>
UV Monitoring Port (Upgradeability)	<b>Yes</b>
Remote - On	<b>Yes</b>
Dry Contacts (Solenoid Ready)	<b>Yes</b>
4-20 mA Output	<b>Yes</b>
Lamp Age Counter	<b>Yes</b>
Visual Lamp-Out Indicator	<b>Yes</b>
Audible Lamp-Out Alarm	<b>Yes</b>
Shipping Weight	<b>Call Factory</b>

## Easy lamp change

Experience troublesome lamp changes and broken sleeves no longer with Radfire's new lamp connector. Lamp changes with an effortless ¼ turn of the connector... no fumbling with metal clips as in competitive systems.



## Flexible Applications:

- Disinfection** Choose your required dose for applications that include restaurants, nursing homes, campgrounds, agricultural, food services, schools, marine, etc.
- Hot Water** For use in hot water applications including recirculation loops, showers, cooling towers, etc., designed for the reduction of legionella
- Low UVT** For applications where water quality may approach 70% UVT or less, choose the low UVT systems to increase the operational performance and reduce nuisance alarms
- TOC** For the reduction of TOC (Total Organic Carbon) using UV lamps at 185 nm output

## System Features

### Remote Monitoring (Dry Contacts) Output (Capability Only) - Included



Allows for the dry contact signal (on/off) provided by the controller to be sent to a remote location. Can be used for remote on, solenoid connection, PLC connection, remote alarm, remote visual, or many other options. (Note: Requires optional Volt Free Connection as shown below)

### Volt Free Connection - Optional



Connector and 10 m (33') of cable to remotely control the RI-37K dry contact signal, Order part number RI-VFC

### UV Sensor Port



RI-37K reactors include an integral UV sensor port for future upgradeability. Simply remove the plug and affix the optional UV Sensor!

### UV Sensor Module - Optional



Allows for the 254nm UV wavelength to be measured and displayed via the Radfire controller. Sensor plugs directly into the controller and is mounted in the sensor port located on RI-37K reactors. Order part number RI-SEN