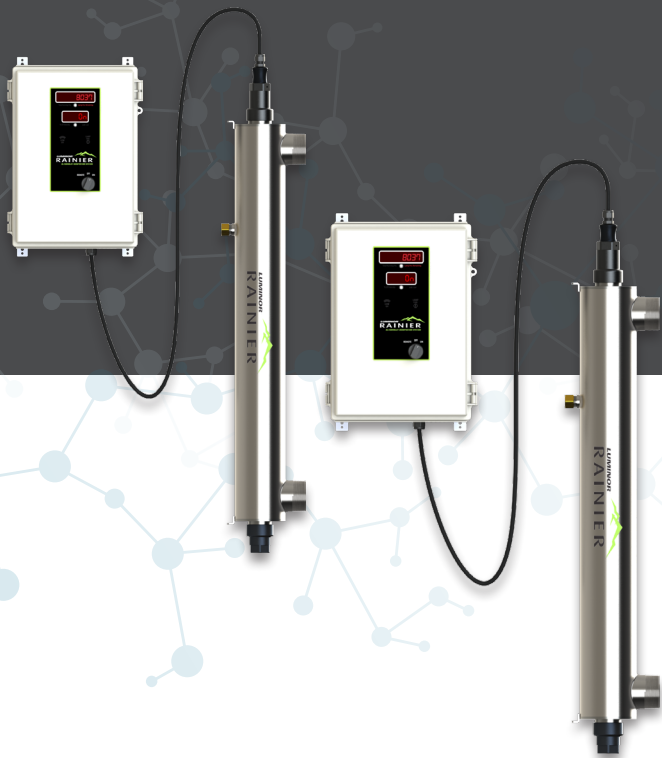**J&F** WATER TREATMENT

LUMINOR™

RAINIER
5.0 / 6.0

COMMERCIAL & INDUSTRIAL DISINFECTION SOLUTIONS

Models: LR5/6-355, LR5/6-555, LR5/6-855, LR5/6-1105, LR5/6-1405, LR5/6-1755

If microbiological protection is required for your commercial/industrial application, then LUMINOR has the solution in the RAINIER 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 RAINIER 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, RAINIER 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, RAINIER has you covered.

Covering a wide variety of applications in both regulated and unregulated markets, RAINIER offers environmentally friendly disinfection at lower capital and operating costs than traditional disinfection solutions.

Product Features

- Available in 110V/60Hz. or 230V/50-60Hz.

- Modular control panel with LED display for UV output, remaining lamp life, total running hours, audible & visual lamp failure, remote on and solenoid ready

- 316L stainless steel, polished reactors, with integral sensor port to allow for sensor upgradeability in the future (comes standard with visual glow plug)

- 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

- Constant current electronic controller in a splash-proof (IP-54) case with audible and visual lamp failure indicators

Flow Rates

35 GPM (132 lpm)	LR5/6-355 Series
58 GPM (220 lpm)	LR5/6-555 Series
85 GPM (322 lpm)	LR5/6-855 Series
110 GPM (416 lpm)	LR5/6-1105 Series
140 GPM (530 lpm)	LR5/6-1405 Series
175 GPM (662 lpm)	LR5/6-1755 Series

LUMINOR™
ENVIRONMENTAL

Illuminating technologies for life

RAINIER - Equipment Specifications

RAINIER, Light Commercial Amalgam UV systems, UV Monitored, UV Non-Monitored

Model	LR5/6-355 LR5/6-355-HW LR5/6-355-TOC	LR5/6-555 LR5/6-555-HW LR5/6-555-TOC	LR5/6-855 LR5/6-855-HW LR5/6-855-TOC	LR5/6-1105 LR5/6-1105-HW LR5/6-1105-TOC	LR5/6-1405 LR5/6-1405-HW LR5/6-1405-TOC	LR5/6-1755 LR5/6-1755-HW LR5/6-1755-TOC
Normal Flow Rate 30 mJ/cm² @ 95% UVT	35 GPM 132 lpm 8 m³/hr.	58 GPM 220 lpm 13.2 m³/hr.	85 GPM 322 lpm 19.3 m³/hr.	110 GPM 416 lpm 25 m³/hr.	140 GPM 530 lpm 31.8 m³/hr.	175 GPM 662 lpm 39.7 m³/hr.
Hot Water Flow Rate 30 mJ/cm² @ 75% UVT	22 GPM 83 lpm 5 m³/hr.	38 GPM 144 lpm 8.6 m³/hr.	60 GPM 227 lpm 13.6 m³/hr.	64 GPM 242 lpm 14.5 m³/hr.	81 GPM 306 lpm 18.4 m³/hr.	95 GPM 360 lpm 21.6 m³/hr.
LOW UVT Flow Rate 30 mJ/cm² @ 50% UVT	14 GPM 53 lpm 3.2 m³/hr.	23 GPM 87 lpm 5.2 m³/hr.	35 GPM 133 lpm 8 m³/hr.	36 GPM 136 lpm 8.2 m³/hr.	45 GPM 170 lpm 10.2 m³/hr.	51 GPM 193 lpm 11.6 m³/hr.
TOC Flow Rate 150 mJ/cm² @ 95% UVT	7 GPM 26 lpm 1.6 m³/hr.	12 GPM 45 lpm 2.7 m³/hr.	17 GPM 64 lpm 3.9 m³/hr.	22 GPM 83 lpm 5 m³/hr.	28 GPM 106 lpm 6.4 m³/hr.	35 GPM 132 lpm 8 m³/hr.
Alt. flow-US Public Health 16 mJ/cm² @ 95% UVT	66 GPM 250 lpm 15 m³/hr.	109 GPM 413 lpm 24.8 m³/hr.	167 GPM 632 lpm 37.9 m³/hr.	207 GPM 784 lpm 47 m³/hr.	263 GPM 996 lpm 59.7 m³/hr.	327 GPM 1240 lpm 74.3 m³/hr.
Alternate Flow 40 mJ/cm² @ 95% UVT	27 GPM 102 lpm 6.1 m³/hr.	44 GPM 167 lpm 10 m³/hr.	67 GPM 252 lpm 15.1 m³/hr.	84 GPM 318 lpm 19.1 m³/hr.	106 GPM 401 lpm 24.1 m³/hr.	131 GPM 496 lpm 29.8 m³/hr.
Port Size	1 ½ "	2"	2"	2 ½"	3"	4"
Electrical	110V/60Hz. or 230V./50-60Hz. (IEC power cords required) (MUST specify voltage when ordering)					
Plug Type	European CEE 7/7, 3-wire for all 230V. - "2" suffix British Standard, BS1363, 3-wire for all 230V. - "3" suffix Australian AS/NZ 3112, 3-wire for all 230V. - "4" suffix North American IEC, 3 prong 110V. - "1" suffix. North American NEMA 6-15, 3 prong 230V. - "5" suffix					
Lamp Watts	104	152	207	304	344	414
Power (Watts)	120	170	220	320	360	430
Replacement Lamp (disinfection @ 254 nm)	RL-500A (1 required)	RL-720A (1 required)	RL-1000A (1 required)	RL-720A (2 required)	RL-843A (2 required)	RL-1000A (2 required)
Replacement Lamp (Hot Water @ 254 nm)	RL-500A-HW (1 required)	RL-720A-HW (1 required)	RL-1000A-HW (1 required)	RL-720A-HW (2 required)	RL-843A-HW (2 required)	RL-1000A-HW (2 required)
Replacement Lamp (TOC @ 185 nm)	RL-500A-TOC (1 required)	RL-720A-TOC (1 required)	RL-1000A-TOC (1 required)	RL-720A-TOC (2 required)	RL-843A-TOC (2 required)	RL-1000A-TOC (2 required)
Replacement Sleeve	RQ-500 (1 required)	RQ-720 (1 required)	RQ-1000 (1 required)	RQ-720 (2 required)	RQ-843 (2 required)	RQ-1000 (2 required)
Chamber Material	316L Stainless Steel, A249 Pressure Rated Tubing, Polished & Passivated					
Reactor Dimensions	4 x 27.2 x 7" (10 x 69 x 18 cm)	4 x 35.8 x 7" (10 x 91 x 18 cm)	4 x 46.9 x 7" (10 x 119 x 18 cm)	6 x 35.8 x 9.4" (15 x 91 x 24 cm)	6 x 40.7 x 9.4" (15 x 103 x 24 cm)	6 x 46.9 x 9.4" (15 x 119 x 24 cm)
Controller Dimensions	12 x 8.4 x 7" (30 x 21 x 18cm)			13.8 x 10.3 x 7" (35 x 26 x 18cm)		
Maximum Operating Pressure	10.3 bar (150 psi)					
Operating Temperature Range	2-60° C (36-148° F)					
UV Monitoring Port (Upgradeability)	YES					
Remote - On	YES					
Dry Contacts (Solenoid Ready)	YES (requires optional **210010** cable assembly sold separately)					
4-20 mA Output	OPTIONAL (requires optional UV sensor (**RS-RUV**) and cable assembly (**210010**), sold separately)					
Lamp Age Counter	YES					
Visual Lamp-Out Indicator	YES					
Audible Lamp-Out Alarm	YES					
Shipping Weight	Call Factory	Call Factory	Call Factory	Call Factory	Call Factory	Call Factory

LUMI-Loc™
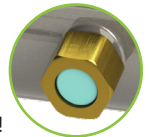

Experience troublesome lamp changes and broken sleeves no longer with LUMINOR's LUMI-LOC™ lamp connector. Lamp changes with an effortless ¼ turn of the connector... no fumbling with metal clips as in competitive systems.

Optional Equipment Modules

UV Sensor Port - Included
All RAINIER reactors include an integral UV sensor port for future upgradeability. Simply remove the plug and affix the optional UV Sensor!
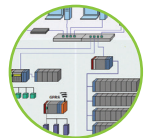
UV Sensor Module - Optional
Allows for the 254nm UV wavelength to be measured and displayed via the RAINIER controller. Sensor plugs directly into the controller and is mounted in the sensor port located on all RAINIER reactors. Order part number RS-RUV

Remote Monitoring (Dry Contacts) Output (Capability Only) - Included
Allows for the dry contact signal (on/off) provided by the RAINIER 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 210010 cable/ connector as shown below)

Remote Monitoring Cable - Optional
Connector and 10 m (33') of cable to remotely control the RAINIER dry contact signal, Order part number 210010

Manufacturer's Warranty

BEST WARRANTY IN THE UV INDUSTRY

REACTORS - Ten (10) year Limited Warranty
ELECTRONICS - Three (3) year Limited Warranty
UV LAMPS - One (1) year Limited Warranty
QUARTZ SLEEVES - One (1) year Limited Warranty

See website for LUMINOR's complete warranty document including conditions and exclusions.

CSA C US   CE   EPA Establishment #088776-CAN-001   Carbon Neutral   MEMBER Water Quality ASSOCIATION   INTERNATIONAL ULTRAVIOLET ASSOCIATION IUVA

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