

K2^{5.0}

Models LK5-A12, LK5-A22, LK5-A42, LK5-A62



COMMERCIAL/INDUSTRIAL DISINFECTION SOLUTIONS

LUMINOR's K2 line of disinfection systems are specifically designed and built to handle the challenging environments of process and manufacturing industries as well as pool and leisure applications.

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 K2^{5.0} 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 LCD output.

Constructed with highly polished 316L stainless steel reactors and stainless steel enclosures, K2^{5.0} uses proven low pressure amalgam (LP-AM) lamp technology for maximum power density and efficiency all in a small footprint.

Controlling microbiological (bacteria & virus) issues in water (or other viscous fluids), including *E.coli*, *Cryptosporidium* and *Giardia lamblia* is safe and simple with LUMINOR UV systems. UV does not affect the aesthetic quality of the fluid and the process does not add anything to the fluid, nor create any disinfection by-products.

Covering a wide variety of applications in both regulated and unregulated markets, K2 offers environmentally friendly disinfection at lower capital and operating costs than traditional disinfection solutions.

Product Features

- Modular 304 stainless steel control panel with LCD display for remaining lamp life, total running hours, audible & visual lamp failure, remote-on and dry contacts
- 316L stainless steel, polished reactors with flanged end-plate
- Designed & manufactured to ASME pressure vessel standards
- Flow rates stated at 95% UVT at a dose of 30 mJ/cm²
- User friendly bayonet style lamp connectors (quick ¼ turn removal with no extra tools needed)
- True gland seal retaining nuts with positive stop
- Reliable, industry proven low pressure amalgam (LP-AM) coated UV lamps with ceramic bases for durability and a 12,000 hour lamp life
- Constant current electronic ballasts

Applications Include:

- Food & Beverage
- Pharmaceutical
- Swimming Pools
- Water Reuse
- Ultrapure
- Recreational Water
- Aquaculture
- Municipal

Available Systems

LK5-A12 for flow rates of 325 lpm (85 gpm) (20 m³/hr)

LK5-A22 for flow rates of 650 lpm (175 gpm) (40 m³/hr)

LK5-A42 for flow rates of 1500 lpm (400 gpm) (90 m³/hr)

LK5-A62 for flow rates of 2400 lpm (625 gpm) (140 m³/hr)

Control Features

- Individual lamp status indicators (visual & audible failure indicators)
- Lamp age monitor (visual & audible failure indicators)
- Lamp cycle counter (tracks total on-off lamp cycles)
- Service time monitor (tracks total system running time)
- Chamber temperature monitor (monitors high temperatures and no flow conditions)
- Panel temperature monitor (protects electronic circuits from extreme temperatures)
- Remote on/off feature (allows reactor to be controlled remotely and timed with other system components)
- Automatic reactor shut-down (user configurable)
- Dry contact outputs
 - Minor alarm (NO/NC)
 - Major alarm (NO/NC)
 - Reactor ready (valve control feature)(NO/NC)
- Major alarm output (audible & visual)
- Minor alarm output (audible & visual)

K2^{5.0} - Equipment Specifications

K2^{5.0}, Commercial / Industrial / Municipal UV Systems, Non-Monitored

Model	LK5-A12	LK5-A22	LK5-A42	LK5-A62
Flow Rate (@15mJ/cm ²)*	167 GPM	327 GPM	758 GPM	1170 GPM
	630 lpm	1240 lpm	2870 lpm	4420 lpm
	28.6 m ³ /hr	55.0 m ³ /hr	87.7 m ³ /hr	175.4 m ³ /hr
Flow Rate (@30mJ/cm ²)	88.8 GPM	174 GPM	404 GPM	623 GPM
	336 lpm	659 lpm	1530 lpm	2360 lpm
	20.2 m ³ /hr	39.5 m ³ /hr	91.8 m ³ /hr	141 m ³ /hr
Flow Rate (@40mJ/cm ²)	66.6 GPM	131 GPM	303 GPM	467 GPM
	252 lpm	496 lpm	1150 lpm	1770 lpm
	15.1 m ³ /hr	29.8 m ³ /hr	68.8 m ³ /hr	106 m ³ /hr
Port Size	2" MNPT	3" Flange	4" Flange	6" Flange
Electrical	220V / 50-60Hz			
Electrical Connection	Direct Wire			
Lamp Watts	207	414	828	1242
Power (Watts)	240	460	900	1340
Chamber Material	316L Stainless Steel, A249 Pressure Rated Tubing, Polished & Passivated			
Replacement Lamp	RL-1000A (1 required)	RL-1000A (2 required)	RL-1000A (4 required)	RL-1000A (6 required)
Replacement Sleeve	RQ-1000 (1 required)	RQ-1000 (2 required)	RQ-1000 (4 required)	RQ-1000 (6 required)
Reactor Dimensions	Contact Factory			
Controller Dimensions	Contact Factory			
Maximum Operating Pressure	10.3 bar (150 psi)			
Operating Temperature Range	2-40° C (36-104° F)			
254nm UV Intensity Monitor	Optional / Upgradeable			
UVT Monitoring	Optional / Upgradeable			
Dose Calculations	Optional / Upgradeable			
Flow Monitoring	Optional / Upgradeable			
Internal Fault History	Yes			
Remote - On	Yes			
Dry Contacts (Solenoid Ready)	Yes			
4-20 mA Output	Yes			
Drain Ports	Yes, 3/8"		Yes, 1/2"	
Lamp Age Counter	Yes			
Sample Ports	No		Yes	
Visual Lamp-Out Indicator	Yes			
Audible Lamp-Out Alarm	Yes			
Shipping Weight	Contact Factory			

*Port sizes are based on flow rates for 30mJ/cm² or higher doses. Flow rates for lower doses may not be achievable. Contact factory for custom port sizing.



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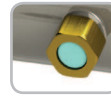
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System Features

UV Sensor Port - Included



All K2^{5.0} reactors include integral UV sensor ports for future upgradeability. Simply remove the plug and affix the optional UV sensors!

UV Sensor Module - Optional



Allows the 254nm UV wavelength to be measured and displayed via the K2 controller. The sensors plug directly into the controller and are mounted in the sensor ports located on all K2^{5.0} and K2^{6.0} reactors. Order **RS-KUV**.

Remote Monitoring (Dry Contacts) Output



Allows for the dry contact signal (on/off) provided by the K2 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)

Expandability Port - Included



Integral communication port allows for system expandability and "future-proofing". New options and expansion modules can communicate with main circuit board through this port.

Manufacturer's Warranty

LUMINOR UV systems are covered by the following warranty:

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

Please refer to LUMINOR's complete warranty document for specific details, including conditions and exclusions. This document may be found on the web or by contacting LUMINOR directly.

Replacement Parts

System	Lamps	Sleeves	Ballast
LK5-A12	RL-1000A (1 required)	RQ-1000 (1 required)	RB-K21
LK5-A22	RL-1000A (2 required)	RQ-1000 (2 required)	RB-K22
LK5-A42	RL-1000A (4 required)	RQ-1000 (4 required)	RB-K22
LK5-A62	RL-1000A (6 required)	RQ-1000 (6 required)	RB-K22