



System Tested and Certified by NSF International against CSA B483.1 and NSF/ANSI 55 for Disinfection Performance, Class A



# BLACKCOMB<sup>6.0</sup>

NSF STANDARD 55, Class A, Independently Certified for Primary Disinfection



## VALIDATED PERFORMANCE

If you are looking for an independently validated UV system for PRIMARY disinfection of a bacteriologically contaminated water source, LUMINOR's new "NSF 55 CLASS A" validated systems is your solution. The BLACKCOMB<sup>6.0</sup> version comes with a true 254nm Teflon<sup>®</sup> based UV sensor to continuously monitor the UV output (performance) of the system and delivers a graphical colour representation of the % UV intensity provided by the system.

Based on a modular, plug and play platform, the BLACKCOMB system has the most advanced residential controller on the market with a colour user interface with a multitude of screens displaying diagnostics, status, warnings and even QR codes for a link back to LUMINOR's website.

Couple this with the capability to fully customize the colour screens with your own dealer information, or different language, and you can easily see how this UV system shines above all others (the optional Custom Dealer Programmer is required...contact factory for further information)!

## Product Features

- True 254nm Teflon<sup>®</sup> based UV sensor continually measures UV output and visually displays output via the controller
- Colour user interface with full diagnostics and warnings including QR codes
- "Future-proof" expandability port for future upgrades and options
- Axial flow, single ended, 304 stainless steel, polished reactors.
- Designed & manufactured to ASME pressure vessel standards
- User friendly bayonet style lamp connector (quick 1/4 turn removal with no extra tools needed)
- Reliable, industry proven low pressure (LP) coated UV lamps with ceramic bases for durability and a 9000 hour life (1 year)
- Constant current electronic controller (one controller for all systems) in a splash-proof case

## Conditions for Use

Your UV system will provide years of use provided the system is maintained on a regular basis as per the specifications outlined in the Owner's Manual. For the UV system to perform as tested, the following water quality parameters must be met.

Parameter	Level
Hardness	< 120 mg/L (7 gpg)
Iron (Fe)	< 0.3 mg/L (ppm)
Manganese (Mn)	< 0.05 mg/L (ppm)
Tannins	< 0.1 mg/L (ppm)
Turbidity	< 1 NTU
Transmittance (UVT)	> 75%

For levels outside those specified in the table above, please contact the factory for further technical assistance.

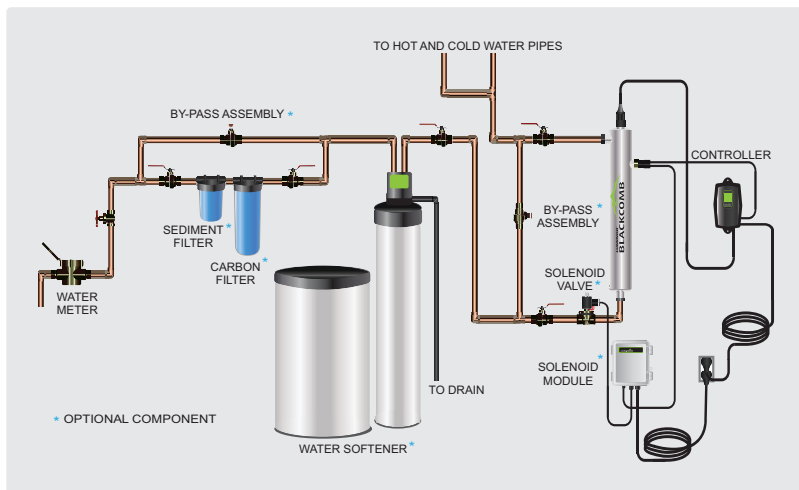
## System Selection

System	Rated Flow	Lamps	Sleeves
LB6-061A	3.4 GPM	RL-470	RQ-470
LB6-101A	6.3 GPM	RL-820	RQ-820
LB6-151A	7.9 GPM	RL-999	RQ-999

## SAMPLE SCREEN SHOTS

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## Typical POE Installation



## UV Sensor (standard on all BLACKCOMB<sup>6.0</sup> systems)



Allows for the 254nm UV intensity to be measured and displayed via the BLACKCOMB controller. UV Sensor (**RS-B2.5A**) comes standard on all BLACKCOMB<sup>6.0</sup> systems.

## Optional Upgrade Modules

### SOLENOID MODULE



Used to power a remote normally closed solenoid valve (not included). Solenoid will close on lamp failure or when low UV conditions are detected by the sensor. Available in 110V. (**MOD-SOL1**) or 230V. (**MOD-SOL2**).

### 4-20m MODULE



Used for signal transfer to a remote device such as a data logger or computer. Order **MOD-420**

### MOD-RAM



Used for a remote alarm connection or dry contacts. Order **MOD-RAM**

## Manufacturers 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  
**UV SENSORS.....**One (1) year Limited Warranty

## Optional Custom Dealer Programmer



Contact factory for an exciting opportunity that will allow you to customize your UV controller with your own company name, logo, website, QR code and contact information. Capture the lucrative replacement lamp market by creating a direct link back to your own website! This technology is **ONLY** available from LUMINOR.

LUMINOR EQUIPMENT SPECIFICATIONS, NSF 55 CLASS A			
BLACKCOMB <sup>6.0</sup> Residential UV systems, UV monitored			
MODEL (see "Plug Type" for all 230 volt variants)	LB6-061A	LB6-101A	LB6-151A
NSF CLASS A Flow Rate (40 m <sup>3</sup> /cm <sup>2</sup> @ 70% UV <sub>T</sub> )	3.4 GPM 12.9 lpm	6.3 GPM 23.8 lpm	7.9 GPM 29.9 lpm
LUMINOR Flow Rate (@ 16 ml/cm <sup>2</sup> @ 95% UV <sub>T</sub> )	11 GPM 41 lpm	20 GPM 77 lpm	30 GPM <sup>1</sup> 113.6 lpm
LUMINOR Flow Rate (@ 30 ml/cm <sup>2</sup> @ 95% UV <sub>T</sub> )	6 GPM 22.7 lpm	11 GPM 41 lpm	15 GPM 56.8 lpm
NSF/ANSI Standard 55 Rating	Class A	Class A	Class A
Flow Restrictor	Integral	Integral	Integral
Port Size	3/4" MNPT	3/4" MNPT	1" MNPT
Electrical	90-265V/50-60Hz.		
Plug Type	North American, NEMA 5-15, 3-wire for all 110V - "1" suffix (i.e. LB6-061A) European, CEE 7/7, 3-wire for all 230V - "2" suffix (i.e. LB6-062A) British Standard, BS 1363, 3-wire for all 230V - "3" suffix (i.e. LB6-063A) Australian/New Zealand, AS/NZ 3112, 3-wire for all 230V - "4" suffix (i.e. LB6-064A)		
Lamp Watts	22	39	50
Power (watts)	30	49	62
Maximum Current (amps)	1	1	1
Replacement Lamp	RL-470	RL-820	RL-999
Replacement Sleeve	RQ-470	RQ-820	RQ-999
Reactor Dimensions	2.5 x 21.3" (6.4 x 54.2 cm)	2.5 x 35.2" (6.4 x 89.5 cm)	2.5 x 40.0" (6.4 x 101.6 cm)
Chamber Material	Polished 304 Stainless Steel, A249 Pressure Rated Tubing		
Controller Dimensions	6.8 x 3.6 x 3" (171.5 x 92.1 x 76.2 mm)		
Operating Pressure	0.7-10.3 bar (10-150 psi)		
Operating Water Temperature	2-40° C (36-104° F)		
254nm UV Intensity Monitor	Yes		
Solenoid Output	Yes, but requires optional solenoid module		
4-20 mA Output	Yes, but requires optional 4-20 mA module		
Lamp Change Reminder (audible & visual)	Yes		
Lamp-Out Indicator (audible & visual)	Yes		
Shipping Weight	4.2 kg. (9.3 lbs.) 5 kg. (9 lbs.) cubed	6.8 kg. (15.0 lbs.) 7 kg. (15 lbs.) cubed	8.0 kg. (17.6 lbs.) 8 kg. (17 lbs.) cubed

**Lamp Life:** UV lamps are rated for 9000 hours of continuous use (one-year of operation).

**General Operation and Maintenance:** UV lamps are to be replaced on an annual basis (9000 hours of operation). Quartz sleeves and UV sensors are to be cleaned every 6-12 months and replaced every 5 years.

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 wastewater or raw sewage to 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).

If this system is used for the treatment of untreated surface waters or ground water under the direct influence of surface water, a device found to be in conformance for cyst reduction under the appropriate NSF/ANSI standard shall be installed upstream of the system.

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

The systems and installation shall comply with applicable provincial/state and local regulations.

**LUMINOR**<sup>™</sup>  
ENVIRONMENTAL

290 Southgate Drive, Unit 2  
Guelph, Ontario, CANADA N1G 4P5  
P: (519) 837-3800  
TF: (855) 837-3801  
F: (519) 837-3808  
e-mail: [info@luminoruv.com](mailto:info@luminoruv.com)  
web: [www.luminoruv.com](http://www.luminoruv.com)



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