

BLACKCOMB / BLACKCOMB-HO

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



CONDITIONS FOR USE

Your 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 following 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) < 0.1 mg/L (ppm)				
Tannins					
Turbidity	<1 NTU				
Transmittance	> 75% UVT				

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

Manufacturer's Warranty

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

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 systems come with a true 254nm Teflon® based UV sensor to continuously monitor the UV output (performance) of the system and delivers a graphical colour representtion 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® based UV sensor continuously measures and displays UV output (as a %)
- NEW colour screen controller with Lightlock ™ for protected lamp replacement, includes QR codes, full diagnostics & warnings
- "Future-proof" expandibility port for future upgrades and options
- Axial flow, stainless steel polished reactors, designed & manufactured to ASME pressure vessel standards 304 on LB6 units and 316L on LBH6
- User friendly bayonet style lamp connector (quick 1/4 turn removal with no extra tools needed)
- Reliable, industry proven, proprietary low pressure coated UV lamps with ceramic bases for durability and long life (9,000 hours on LB6 units and 10.000 hours on LBH6 units)
- Constant current electronic controller (one controller for all LP units and one for all LPHO units) in a splash proof case, fully potted ballast virtually eliminates common water damage issue
- Full customization available as an option (language, home screen, phone, QR codes, etc.)



A

49%

Low UV

Warning Screen



Screen



Screen

Scan QR Code



Lamp

Expiration Screen

UV OUTPUT

unsafe for consumption

water may be Unsafe

Water

lamp failure replace lamp

QR Code Screen

Lamp Failure Screen

Available Modules

UV Sensor Module (standard on all systems)



Allows the 254nm UV wavelength to be measured and displayed via the BLACKCOMB contoller. The sensor plugs directly into the contoller and is mounted in the sensor port located on all BLACKCOMB^{5.0} or BLACKCOMB^{6.0} reactors.

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)

4-20mA Module



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

TRV (temperature management relief



TRV allows for a small amount of water to be physically released (dumped) from the UV unit to allow for cooling of the water. This is a fully automatic process that dumps water when the water inside the UV reactor reaches a preset temperature. Used in applications of extended "no flow" conditions, or when the temperature of the treated water is of a critical nature.



To reduce water temperature inside the reactor through mechanics and convection without wasting any water. Runs independently and continuously. Comes with a compact modular power adapter with interchangeable AC clips that operates from 90-264V (47-63Hz.)

Remote Alarm (Dry Contact) Module



Used for signal transfer to a remote alarm or dry contacts. Order MOD-

SPECIFICATIONS	BLACKCOMB (standard-output)				BLAC	BLACKCOMB-HO (high-output, compact design)					
Model	LB6-02XA LB6-02A-12V LB6-02A-24V	LB6-03XA LB6-03A-12V LB6-03A-24V	LB6-06XA LB6-06A-12V LB6-06A-24V	LB6-10XA LB6-10A-24V	LB6-15XA	LBH6-05XA	LBH6-10XA	LBH6-15XA	LBH6-25XA	LBH6-40XA	
NSF Class A Flow Rate (40mJ/cm² @ 70% UVT)	1.6 GPM	2.2 GPM	3.4 GPM	6.3 GPM	7.9 GPM	2.2 GPM	4.0 GPM	5.4 GPM	7.9 GPM	13.0 GPM	
	6.1 lpm	8.3 lpm	12.9 lpm	23.8 lpm	29.9 lpm	8.3 lpm	15.1 lpm	20.4 lpm	29.9 lpm	49.2 lpm	
	0.36 m³/hr	0.5 m³/hr	0.77 m³/hr	1.43 m³/hr	1.79 m³/hr	0.5 m³/hr	0.91 m³/hr	1.23 m³/hr	1.79 m³/hr	2.95 m³/hr	
Flow Restrictor	integral	integral	integral	integral	integral	integral	integral	integral	integral	integral	
Port Size	½"FNPT	½"MNPT	¾"MNPT	¾"MNPT	1"MNPT	½"MNPT	¾"MNPT	1"MNPT	1"MNPT	1 ½"MNPT	
Electrical	90-265V/50-60Hz. / 12VDC / 24VDC as indicated										
Plug Type	American, Nema 5/15, 3 wire for all 110V systems, replace "X" with "1" suffix (i.e. LB6-101A) European, CEE 7/7, 3 wire for all 230V systems, replace "X" with "2" suffix (i.e. LB6-102A) British Standard, BS 1363, 3 wire for all 230V systems, replace "X" with "3" suffix (i.e. LB6-103A) Australian/New Zealand, AS/NZ 3112, 3 wire for all 230V systems, replace "X" with "4" suffix (i.e. LB6-104A)										
Lamp Watts	8	15	22	39	50	18	34	45	67	101	
Power (Watts)	14	20	30	49	62	20 (19 @ 230V.)	38 (36 @ 230V.)	57 (48 @ 230V.)	73 (72 @ 230V.)	115 (108 @ 230V.)	
Maximum Current (amps)	1	1	1	1	1	1	1	1	1	1	
Replacement Lamp	RL-210	RL-290	RL-470	RL-820	RL-999	RL-210H0	RL-330H0	RL-420H0	RL-600H0	RL-950H0	
Replacement Sleeve	RQ-210	RQ-290	RQ-470	RQ-820	RQ-999	RQ-210	RQ-330	RQ-420	RQ-600	RQ-950	
Replacement UV Sensor	RS-B2.5V	RS-B2.5V	RS-B2.5V	RS-B2.5V	RS-B2.5V	RSHO-B3.5V	RSHO-B3.5V	RSHO-B3.5V	RSHO-B3.5V	RSH0-B3.5V	
Chamber Material	Polished 304 stainless steel, A249 pressure rated tubing Polished 316L stainless steel, A249 pressure rated tubing										
Reactor Dimensions	2.5 x 10.3" (6.4 x 26.2cm)	2.5 x 14.3" (6.4 x 36.4cm)	2.5 x 21.3" (6.4 x 54.2cm)	2.5 x 35.2" (6.4 x 89.5cm)	2.5 x 40.0" (6.4 x 101.6cm)	3.5 x 16.5" (8.9 x 41.8cm)	3.5 x 16.5" (8.9 x 41.8cm)	3.5 x 20.0" (8.9 x 50.8cm)	3.5 x 26.9" (8.9 x 68.3cm)	3.5 x 40.7" (8.9 x 103.4cm)	
Controller Dimensions	6.8 x 3.6 x 3" (17.2 x 9.2 x 7.6 cm) 8.6 x 4.2 x 3.5" (21.7 x 10.8 x 8.9 cm)										
Operating Pressure	7-10.3 bar (10-150 psi)										
Operating Water Temp.	2-40° C (36 - 104°F)										
UV Monitor	YES										
Solenoid Output	YES (but requires optional solenoid module) (MOD-SOL)										
Dry Contacts	YES (but requires optional remote alarm module) (MOD-RAM)										
4-20mA Output				YES (but requires optional	4-20mA module) (MOI	D-420)				
Lamp Change Reminder	YES (both audible and visual (full colour graphic))										
Lamp Out Indicator	YES (both audible and visual (full colour graphic))										
Shipping Weight	3.0 kg (6.6 lbs)	3.3 kg (7.3 lbs)	4.2 kg (9.3 lbs)	6.8 kg (15.0 lbs)	8.0 kg (17.6 lbs)	4.5 kg (9.9 lbs)	5.4 kg (11.9 lbs)	6.0 kg (13.2 lbs)	7.3 kg (16.1 lbs)	9.8 kg (21.6 lbs)	

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.

Lamp Life: UV lamps are rated for 9000 hours (10000 hours for all LBH6 systems) of continuous use (one-year of operation General Operation and Maintenance: UV lamps are to be replaced on an annual basis (9000 hours for LB6 systems and 10000 hours for LBH6 systems). 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

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.

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