

LUMINOR™

BLACKCOMB

NSF STANDARD, CLASS B

VALIDATED PERFORMANCE

Independently Certified
for Supplemental Disinfection



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

PRODUCT FEATURES

- True 254nm Teflon® based UV sensor measures continuously, displaying UV intensity as a % – standard on LB6 / LBH6 units ONLY
- Colour screen controller with Lightlock™ for protected lamp replacement
- Expandability port for future upgrades and options
- Axial flow, stainless steel polished reactors, designed & manufactured to ASME pressure vessel standards
- Simple lamp changes
- Reliable, industry proven, proprietary low pressure coated UV lamps with ceramic bases for durability and long life
- Constant current electronic controller in a splash proof case
- Full customization available as an option – language, home screen, phone number, QR codes, etc.

SAMPLE SCREENS



If you are looking for an independently validated UV system for supplemental disinfection of a potable water source, LUMINOR's "NSF 55 CLASS B" validated system is your solution.

The BLACKCOMB 6.1 model includes a true 254nm Teflon® based UV sensor to continuously monitor the UV intensity, displaying it as a percentage on the colour screen. The BLACKCOMB 5.1 model is factory-ready to accept a UV sensor in the future if desired.

The colour screen controller has a user interface with screens displaying diagnostics, status, warnings and QR codes for a link back to LUMINOR's website.

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 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 | > 75% UVT |

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

MANUFACTURER'S 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



See luminoruv.com for complete warranty document, including conditions and exclusions.



BLACKCOMB NSF STANDARD 55, CLASS B - EQUIPMENT SPECIFICATIONS

| BLACKCOMB (STANDARD-OUTPUT) | | | | | | BLACKCOMB-HO (High-output, compact design) | | | | |
|---|---|-------------------------------|-------------------------------|-------------------------------|--------------------------------|---|-------------------------------|-------------------------------|-------------------------------|--------------------------------|
| MODEL | LB5-02XB LB6-02XB | LB5-03XB LB6-03XB | LB5-06XB LB6-06XB | LB5-10XB LB6-10XB | LB5-15XB LB6-15XB | LBH5-05XB LBH6-05XB | LBH5-10XB LBH6-10XB | LBH5-15XB LBH6-15XB | LBH5-25XB LBH6-25XB | LBH5-40XB LBH6-40XB |
| NSF Class B Flow Rate (16mJ/cm² @ 70% UVT) | 2.9 GPM | 5.2 GPM | 7.6 GPM | 13.0 GPM | 22.0 GPM | 5.4 GPM | 7.6 GPM | 13 GPM | 22 GPM | 28 GPM |
| | 11.0 lpm | 19.7 lpm | 28.8 lpm | 49.2 lpm | 83.3 lpm | 20.4 lpm | 28.8 lpm | 49.2 lpm | 83.3 lpm | 106.0 lpm |
| | 0.7 m³/hr | 1.18 m³/hr | 1.73 m³/hr | 2.95 m³/hr | 5.00 m³/hr | 1.23 m³/hr | 1.73 m³/hr | 2.95 m³/hr | 5.00 m³/hr | 6.36 m³/hr |
| Flow Restrictor | 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 as indicated | | | | | | | | | |
| Plug Type | American, Nema 5/15, 3 wire for all 110V systems, replace "X" with "1" suffix (i.e. LB6-101B) European, CEE 7/7, 3 wire for all 230V systems, replace "X" with "2" suffix (i.e. LB6-102B) British Standard, BS 1363, 3 wire for all 230V systems, replace "X" with "3" suffix (i.e. LB6-103B) Australian/New Zealand, AS/NZ 3112, 3 wire for all 230V systems, replace "X" with "4" suffix (i.e. LB6-104B) | | | | | | | | | |
| 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-210HO | RL-330HO | RL-420HO | RL-600HO | RL-950HO |
| 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-B2.5 | RS-B2.5 | RS-B2.5 | RS-B2.5 | RS-B2.5 | RSHO-B3.5 | RSHO-B3.5 | RSHO-B3.5 | RSHO-B3.5 | RSHO-B3.5 |
| 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 4" (17.2 x 9.2 x 10.2 cm) | | | | | 8.6 x 4.2 x 4" (21.8 x 10.7 x 10.2 cm) | | | | |
| Operating Pressure | 0.7-10.3 bar (10-150 psi) | | | | | | | | | |
| Operating Water Temp. | 2-40° C (36 - 104°F) | | | | | | | | | |
| UV Monitor | YES on all LB6 / LBH6 units , OPTIONAL on all LB5 / LBH5 units (RS-2.5 for LB5/6 units and RSHO.3.5 for LBH5/6 units) | | | | | | | | | |
| Solenoid Output | YES (but requires optional solenoid module (MOD-SOL)) | | | | | | | | | |
| Dry Contacts | YES (but requires optional remote alarm module (Dry Contacts) (MOD-RAM)) | | | | | | | | | |
| 4-20mA Output | YES (but requires optional 4-20mA module (MOD-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 EQUIPMENT MODULES

UV Concierge

Available for WEB, iOS, and Android platforms providing live, dynamic feedback on all features and functions of your UV system.



SHERPA Series Water Quality Monitor

Allows for remote monitoring of all major and minor alarms that take place on the UV system. Three LED's visually display system functionality from up to 150' (46m) away.



Custom Dealer Programmer

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.



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)



TRV (temperature management relief valve)

TRV allows for a small amount of water to be physically released (dumped) from the UV unit to allow for cooling of the water. Used in applications of extended "no flow" conditions, or when the temperature of the treated water is of a critical nature.



Cooling Fan

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



4-20mA Module

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



Remote Alarm (Dry Contact) Module

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



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 (blackwater), and other waste materials deposited in plumbing fixtures (greywater).

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.



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