

## UV WATER TREATMENT SYSTEM

- 2 to 21 GPM
- Colour screen controller
- Lightlock™ technology for protected lamp replacement sales

If you are looking for UV water treatment for your home, LUMINOR has the solution in the BLACKCOMB series of residential UV systems.

BLACKCOMB provides UV water treatment for your home with the inclusion of a true 254nm Teflon® based UV sensor that continuously monitors the performance of the UV system, displaying the output via a colour screen (optional on 5.1 systems). In addition to UV output, diagnostics, system status, warnings and QR codes can also be displayed.

With the integral expandability port, the addition of a 4-20mA output or a solenoid valve is a simple plug-and-play option.

### Product Features

- Free floating (no cable twist), keyed-in-place, 254nm Teflon® based UV sensor measures continuously, displaying UV intensity as a % – std. on LB6, optional on LB5
- Colour screen controller with Lightlock™ for protected lamp replacement, includes QR codes, full diagnostics & warnings
- Expandability port for future upgrades and options
- Axial flow, 304 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



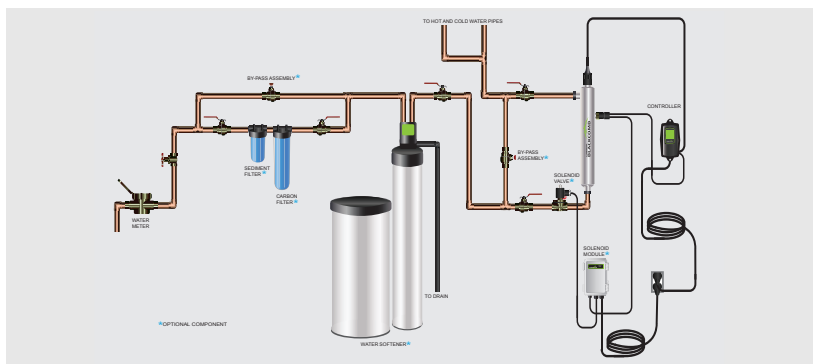
#### Point-of-Use (POU)

**LB5/6-02 series**, for flow rates of 8 lpm (2 gpm)  
**LB5/6-03 series**, for flow rates of 11 lpm (3 gpm)

#### Point-of-Entry (POE)

**LB5/6-06 series**, for flow rates of 23 lpm (6 gpm)  
**LB5/6-10 series**, for flow rates of 41 lpm (11 gpm)  
**LB5/6-15 series**, for flow rates of 57 lpm (15 gpm)  
**LB5/6-20 series**, for flow rates of 79 lpm (21 gpm)

## Typical POE Installation



## BLACKCOMB 5.1/6.1 SO - Equipment Specifications

| BLACKCOMB (standard-output)                      |                                                                                                                                                                                                                                                                                                                                             |                               |                               |                               |                                |                               |
|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------------|-------------------------------|--------------------------------|-------------------------------|
| Model                                            | LB5-021<br>LB6-021                                                                                                                                                                                                                                                                                                                          | LB5-031<br>LB6-031            | LB5-061<br>LB6-061            | LB5-101<br>LB6-101            | LB5-151<br>LB6-151             | LB5-201<br>LB6-201            |
| Flow Rate<br>(30mJ/cm <sup>2</sup> @<br>95% UVT) | 2 GPM                                                                                                                                                                                                                                                                                                                                       | 3 GPM                         | 6 GPM                         | 11 GPM                        | 15 GPM                         | 21 GPM                        |
|                                                  | 7.6 lpm                                                                                                                                                                                                                                                                                                                                     | 11.4 lpm                      | 22.7 lpm                      | 41 lpm                        | 57 lpm                         | 79 lpm                        |
|                                                  | 0.45 m <sup>3</sup> /hr                                                                                                                                                                                                                                                                                                                     | 0.7 m <sup>3</sup> /hr        | 1.4 m <sup>3</sup> /hr        | 2.5 m <sup>3</sup> /hr        | 3.4 m <sup>3</sup> /hr         | 4.8 m <sup>3</sup> /hr        |
| Flow Rate<br>(40mJ/cm <sup>2</sup> @<br>95% UVT) | 1.6 GPM                                                                                                                                                                                                                                                                                                                                     | 2.4 GPM                       | 4.4 GPM                       | 8.3 GPM                       | 12 GPM                         | 16 GPM                        |
|                                                  | 6.1 lpm                                                                                                                                                                                                                                                                                                                                     | 9.1 lpm                       | 17 lpm                        | 31 lpm                        | 45.4 lpm                       | 59 lpm                        |
|                                                  | 0.36 m <sup>3</sup> /hr                                                                                                                                                                                                                                                                                                                     | 0.5 m <sup>3</sup> /hr        | 1.0 m <sup>3</sup> /hr        | 1.9 m <sup>3</sup> /hr        | 2.7 m <sup>3</sup> /hr         | 3.6 m <sup>3</sup> /hr        |
| Flow Rate<br>(16mJ/cm <sup>2</sup> @<br>95% UVT) | 4 GPM                                                                                                                                                                                                                                                                                                                                       | 6 GPM                         | 11 GPM                        | 20 GPM                        | 30 GPM                         | 39 GPM                        |
|                                                  | 15.1 lpm                                                                                                                                                                                                                                                                                                                                    | 23 lpm                        | 41 lpm                        | 77 lpm                        | 114 lpm                        | 150 lpm                       |
|                                                  | 0.9 m <sup>3</sup> /hr                                                                                                                                                                                                                                                                                                                      | 1.4 m <sup>3</sup> /hr        | 2.5 m <sup>3</sup> /hr        | 4.6 m <sup>3</sup> /hr        | 6.8 m <sup>3</sup> /hr         | 8.9 m <sup>3</sup> /hr        |
| Port Size                                        | ½" FNPT                                                                                                                                                                                                                                                                                                                                     | ½" MNPT                       | ¾" MNPT                       | ¾" MNPT                       | 1" MNPT                        | 1" MNPT                       |
| Electrical                                       | 90-265V/50-60Hz. 1A Max.                                                                                                                                                                                                                                                                                                                    |                               |                               |                               |                                |                               |
| Plug Type                                        | American, NEMA 5/15, 3 wire for all 110V systems, "1" suffix (i.e. LB5-101)<br>European, CEE 7/7, 3 wire for all 230V systems, "2" suffix (i.e. LB5-102)<br>British Standard, BS 1363, 3 wire for all 230V systems, "3" suffix (i.e. LB5-103)<br>Australian/New Zealand, AS/NZ 3112, 3 wire for all 230V systems, "4" suffix (i.e. LB5-104) |                               |                               |                               |                                |                               |
| Lamp Watts                                       | 8                                                                                                                                                                                                                                                                                                                                           | 15                            | 22                            | 39                            | 50                             | 42                            |
| Power (Watts)                                    | 14                                                                                                                                                                                                                                                                                                                                          | 20                            | 30                            | 49                            | 62                             | 51                            |
| Maximum Current (amps)                           | 1                                                                                                                                                                                                                                                                                                                                           | 1                             | 1                             | 1                             | 1                              | 1                             |
| Replacement Lamp                                 | RL-210                                                                                                                                                                                                                                                                                                                                      | RL-290                        | RL-470                        | RL-820                        | RL-999                         | RL-850                        |
| Replacement Sleeve                               | RQ-210                                                                                                                                                                                                                                                                                                                                      | RQ-290                        | RQ-470                        | RQ-820                        | RQ-999                         | RQ-850                        |
| Chamber Material                                 | Polished 304 stainless steel, A249 pressure rated tubing                                                                                                                                                                                                                                                                                    |                               |                               |                               |                                |                               |
| Reactor Dimensions                               | 2.5 x 10.3"<br>(6.4 x 26.2cm)                                                                                                                                                                                                                                                                                                               | 2.5 x 14.3"<br>(6.4 x 36.4cm) | 2.5 x 21.3"<br>(6.4 x 54.2cm) | 2.5 x 35.2"<br>(6.4 x 89.5cm) | 2.5 x 40.0"<br>(6.4 x 101.6cm) | 3.5 x 36.1"<br>(8.9 x 91.7cm) |
| Controller Dimensions                            | 17.2 x 9.2 x 10.2 cm (6.8 x 3.6 x 4")                                                                                                                                                                                                                                                                                                       |                               |                               |                               |                                |                               |
| Operating Pressure                               | 0.7-10.3 bar (10-150 psi)                                                                                                                                                                                                                                                                                                                   |                               |                               |                               |                                |                               |
| Operating Water Temp.                            | 2-40° C (36 - 104°F)                                                                                                                                                                                                                                                                                                                        |                               |                               |                               |                                |                               |
| UV Monitor                                       | YES on LB6 (optional on LB5), RS-B2.5                                                                                                                                                                                                                                                                                                       |                               |                               |                               |                                | RS-B3.5 optional on LB5       |
| 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) (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                                  | 2.9 kg (6.3 lbs)                                                                                                                                                                                                                                                                                                                            | 3.6 kg (7.9 lbs)              | 4.4 kg (9.6 lbs)              | 6.0 kg (13.2 lbs)             | 6.5 kg (14.4 lbs)              | 8.2 kg (18.0 lbs)             |

## 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](http://luminoruv.com) for complete warranty document, including conditions and exclusions.

## Guaranteed OEM Lamp Replacement with Lightlock™ technology

Protect your replacement lamp revenue stream with LUMINOR's truly proprietary UV lamps with Lightlock™ technology. Maintain your lamp sales, and more importantly your lamp margin, all while protecting the integrity of the product and its performance.



## 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!



### UV Sensor Module

Allows the UV intensity to be measured and displayed via the controller. The sensor plugs directly into the controller and is mounted in the sensor port located on all reactors. (see chart for part numbers)



### 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.



### 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.



**LUMINOR Environmental Inc.**  
 80 Southgate Drive, Unit 4  
 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)

