

# BLACKCOMB<sup>5.0</sup>

Models LB5-031, LB5-061, LB5-101, LB5-151, LB5-201



## CONTROL YOUR OWN WATER QUALITY!

If you are unsure of the microbiological quality of your source water or if you are looking for additional security from your municipal water source, then LUMINOR has the solution in the BLACKCOMB<sup>5.0</sup> series of residential UV systems.

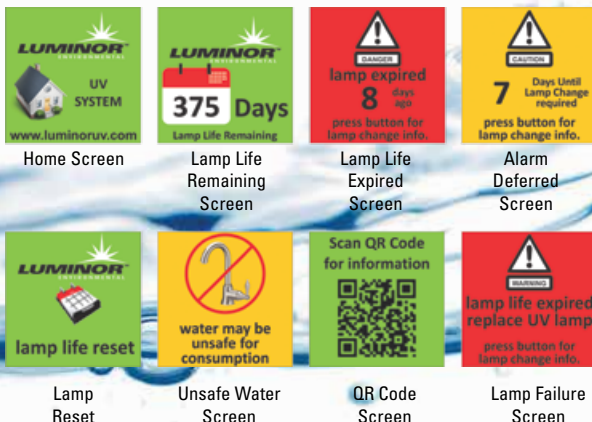
UV technology is proven to control microbiological (bacteria & virus) issues in water including *E.coli*, *Cryptosporidium* and *Giardia lamblia*.

Truely modular in design, BLACKCOMB<sup>5.0</sup> provides easy upgradeability in the future. Incorporating true "plug-and-play" technology, conversion to a UV monitor is a quick and simple process. A robust full colour controller displays complete system status, lamp countdown, warnings, and a QR code that allows the homeowner to use their smartphone to obtain lamp replacement information or to view service videos! BLACKCOMB incorporates technology that has never been seen in a UV system until now!

### Product Features

- Colour user interface with full diagnostics and warnings including QR codes
- Full customization available as an option (language, home screen, phone, web, QR codes, etc.)
- New axial flow, 304 stainless steel reactors, fully polished, designed & manufactured to ASME pressure vessel standard
- Systems include integral UV sensor port for future upgradeability (simply purchase optional UV sensor module to convert system into a fully UV monitored system)
- Flow rates stated at 95% UVT at a dose of 30mJ/cm<sup>2</sup>
- User friendly bayonet style lamp connector (quick ¼ turn removal with no extra tools needed)
- True gland seal retaining nut with positive stop
- Reliable, industry proven, proprietary low pressure (LP) coated UV lamps with ceramic bases for durability and a 9,000 hour life (1 year)
- Constant current electronic controller (one controller for all systems) in a splash-proof case, fully potted ballast virtually eliminates common water damage issue

### Sample Screen Shots

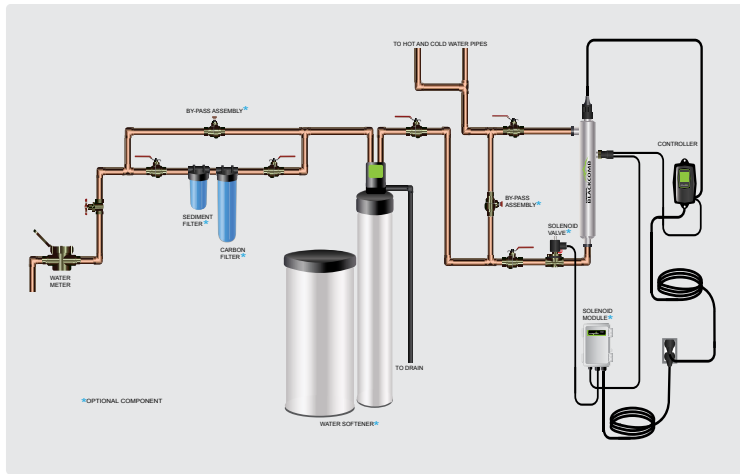


### Available Systems

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

- LB5-031 series**, for flow rates of 12 lpm (3 gpm)
- LB5-061 series**, for flow rates of 23 lpm (6 gpm)
- LB5-101 series**, for flow rates of 41 lpm (11 gpm)
- LB5-151 series**, for flow rates of 57 lpm (15 gpm)
- LB5-201 series**, for flow rates of 79 lpm (21 gpm)

# Typical POE Installations



## BLACKCOMB<sup>5.0</sup> - Equipment Specifications

| BLACKCOMB <sup>5.0</sup> , Residential UV Systems, UV Monitored |   |   |                                |                                 |                                |
|---|---|---|--------------------------------|---------------------------------|--------------------------------|
| Model   | LB5-031   | LB5-061   | LB5-101                        | LB5-151                         | LB5-201                        |
| Flow Rate<br>(@16mJ/cm <sup>2</sup> )                           | 6 GPM   | 11 GPM  | 20 GPM                         | 30 GPM                          | 39 GPM                         |
|   | 23 lpm  | 41 lpm  | 77 lpm                         | 114 lpm                         | 150 lpm                        |
|   | 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         |
| Flow Rate<br>(@30mJ/cm <sup>2</sup> )                           | 3 GPM   | 6 GPM   | 11 GPM                         | 15 GPM                          | 21 GPM                         |
|   | 11.4 lpm  | 22.7 lpm  | 41 lpm                         | 57 lpm                          | 79 lpm                         |
|   | 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> )                           | 2.4 GPM   | 4.4 GPM   | 8.3 GPM                        | 12 GPM                          | 16 GPM                         |
|   | 9.1 lpm   | 17 lpm  | 31 lpm                         | 45.4 lpm                        | 59 lpm                         |
|   | 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         |
| Port Size   | ½" MNPT   | ¾" MNPT   | ¾" MNPT                        | 1" MNPT                         | 1" MNPT                        |
| Electrical  | 90-265V/50-60Hz.  |   |                                |                                 |                                |
| 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  | 15  | 22  | 39                             | 50                              | 42                             |
| Power (Watts)   | 20  | 30  | 49                             | 62                              | 51                             |
| Chamber Material  | 304 Stainless Steel, A249 Pressure Rated Tubing, Polished & Passivated  |   |                                |                                 |                                |
| Reactor Dimensions  | 2.5 x 14.3"<br>(6.4 x 36.4 cm)  | 2.5 x 21.3"<br>(6.4 x 54.2 cm)                  | 2.5 x 35.2"<br>(6.4 x 89.5 cm) | 2.5 x 40.0"<br>(6.4 x 101.6 cm) | 3.5 x 36.1"<br>(8.9 x 91.7 cm) |
| Controller Dimensions   | 6.8 x 3.6 x 3" (17.2 x 9.2 x 7.6 cm)  |   |                                |                                 |                                |
| Operating Pressure  | 0.7-10.3 bar (10-150 psi)   |   |                                |                                 |                                |
| Operating Water Temperature                                     | 2-40° C (36-104° F)   |   |                                |                                 |                                |
| UV Monitor Port   | No  | Yes (optional UV sensor module sold separately) |                                |                                 |                                |
| Solenoid Output   | Yes (but requires optional solenoid module) (activated on lamp failure)   |   |                                |                                 |                                |
| Dry Contacts  | Yes (but requires optional remote alarm module)   |   |                                |                                 |                                |
| 4-20mA Output   | Yes (but requires optional 4-20mA module)   |   |                                |                                 |                                |
| Lamp Change Reminder (audible & visual)                         | Yes   |   |                                |                                 |                                |
| Lamp Out Indicator (audible & visual)                           | Yes   |   |                                |                                 |                                |
| Shipping Weight   | 3.3 kg<br>(7.3 lbs)   | 4.2 kg<br>(9.3 lbs)                             | 6.8 kg<br>(15.0 lbs)           | 8.0 kg<br>(17.6 lbs)            | 7.5 kg<br>(16.5 lbs)           |

## Optional Upgrade Modules

### UV Sensor Module



Allows the 254nm UV wavelength to be measured and displayed via the BLACKCOMB controller. The sensor plugs directly into the controller and is mounted in the sensor port located on all BLACKCOMB<sup>5.0</sup> or BLACKCOMB<sup>6.0</sup> reactors. Order **RS-B2.5** for 6, 10 & 15 gpm systems and **RS-B3.5** for 20 gpm systems.

### 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**

### Remote Alarm (Dry Contact) Module



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

## 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

## Optional Custom Dealer Programming Module



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.

## Replacement Parts

| System         | Lamps  | Sleeves | UV Sensor (optional) |
|----------------|--------|---------|----------------------|
| <b>LB5-031</b> | RL-290 | RQ-290  | RS-B2.5              |
| <b>LB5-061</b> | RL-470 | RQ-470  | RS-B2.5              |
| <b>LB5-101</b> | RL-820 | RQ-820  | RS-B2.5              |
| <b>LB5-151</b> | RL-999 | RQ-999  | RS-B2.5              |
| <b>LB5-201</b> | RL-850 | RQ-850  | RS-B3.5              |



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