

## FAQ DOCUMENT

# Power Your Golf Cart with BW Lithium Batteries

Smart Power. Lasting Energy



Barry +27 (0) 82 823 4847  
Tyler +27 (0) 82 650 0897



admin@bwlbatteries.co.za



www.bwlbatteries.com

|    |                                                                                                                                           |
|----|-------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | <b>Which golf carts are compatible with your batteries?</b>                                                                               |
|    | Our batteries are designed to power most leading golf cart brands including EZGO, HIOEV and Secolo. We also offer custom-built solutions. |

|    |                                                                                                                                                                                                                                                             |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2. | <b>Do you sell directly to individuals or only to businesses?</b>                                                                                                                                                                                           |
|    | <p>We supply both individual golf cart owners as well as golf clubs, fleet operators and dealers.</p> <p>However, if you own a business and are interested in becoming a reseller, you are welcome to register with us. We'd be happy to work with you.</p> |

|    |                                                                                                                                                                                              |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3. | <b>How do I register as a dealer?</b>                                                                                                                                                        |
|    | Please send an email to <a href="mailto:admin@bwlbatteries.com">admin@bwlbatteries.com</a> which includes your company details and we will get back to you with the necessary documentation. |

|    |                                                                                                                      |
|----|----------------------------------------------------------------------------------------------------------------------|
| 4. | <b>How long does delivery take?</b>                                                                                  |
|    | Delivery times vary based on location and stock availability but we'll confirm lead times when you place your order. |

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5. | <b>How can I connect my BW lithium battery to the app in my phone?</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|    | <ol style="list-style-type: none"> <li>Switch on the battery<br/>Ensure the battery is powered and not in sleep mode.</li> <li>Stay close<br/>Stand within 1–5 meters of the battery.</li> <li>Download the app (<b>KINGOR BW Battery</b>)<br/>Scan the QR code on the battery or download the recommended BMS app from the App Store or Google Play.</li> <li>Turn on Bluetooth<br/>Enable Bluetooth on your phone.<br/>(Do not pair in phone settings unless instructed.)</li> <li>Open the app &amp; scan<br/>Open the app and tap Scan / Search / Connect.</li> <li>Select the battery<br/>Tap the battery name or ID.</li> <li>Connected<br/>Battery info (percentage, voltage, status) will display on screen.</li> </ol> <p>Please take note that only one phone can connect at a time.</p> |



|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6. | <b>Do I need a new charger for a lithium battery upgrade?</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|    | <p>Yes, in most cases. Lithium packs require a CC/CV (constant current/constant voltage) profile matched to the pack voltage and manufacturer's recommended cutoff.</p> <p>A legacy lead-acid charger may overcharge, undercharge or run equalization routines that aren't suitable for lithium batteries. Choose a charger with the correct voltage, appropriate current (to hit your desired charging time), temperature safeguards and ideally communication or settings approved by the battery brand. This protects battery life and ensures you actually experience the "faster charging" advantage.</p> <p>Note: When purchasing a battery from BW Lithium batteries a brand new CC/CV charger is included in the box.</p> |

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 7. | <b>How does hot or cold weather affect my Lithium Battery performance and storage?</b>                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|    | <p>All batteries are temperature-sensitive. Lithium performs well in typical ambient ranges but most packs implement low-temperature charge protection to prevent charging below freezing. In winter, store the cart in a sheltered area and charge after the pack returns above the cut-off temperature. For seasonal storage, leave the pack at ~40–60% state of charge, disconnect parasitic loads and check your battery every 2 – 3 months. These practices protect battery performance and maximize long term benefits.</p> |

|    |                                                                                                                                                                                                                                                                                                                                                |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8. | <b>Can I mix Lithium and Lead-Acid Batteries or keep some old Lead-Acid accessories?</b>                                                                                                                                                                                                                                                       |
|    | <p>Do not mix chemistries in the same series or parallel string. Lithium and lead-acid have different voltage curves, internal resistance and charge profiles which can lead to imbalance, accelerated wear and potential safety risks. Replace the full set with a properly sized lithium battery and ensure the charger matches lithium.</p> |

|    |                                                                                                                                                                                        |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 9. | <b>How do I calculate the real ROI of upgrading to BW Lithium Batteries?</b>                                                                                                           |
|    | <p>Proper battery selection may require the assistance of a knowledgeable battery sales/service technician.</p> <p>Avoid focusing only on upfront price. Build a simple TCO model:</p> |



|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|  | <p>Purchase cost + (electricity cost × kWh used) + maintenance/time cost – residual value over a fixed period (e.g., 5–8 years).</p> <p>Lithium’s higher round-trip efficiency lowers electricity spend; its minimal battery maintenance saves time and shop supplies; and longer cycle life usually avoids a mid-life replacement that lead-acid often requires.</p> <p>Fleets, campuses, resorts and high-utilization owners typically see the fastest payback because reduced downtime and faster charging translate directly into more operational hours.</p> |  |
|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|

|     |                                                                                                                                                                                                                                                                                                                                                                                                                    |  |
|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 10. | <b>What should I do with my old lead-acid battery after a lithium battery upgrade?</b>                                                                                                                                                                                                                                                                                                                             |  |
|     | <p>Never landfill lead-acid batteries. Use certified recycling channels - many auto parts stores, scrap dealers or municipal sites accept them and may offer a core credit. Alternatively you can ask the installer or lithium battery supplier to recycle the battery or recommend a recycler. Just remember to always keep the cases upright, avoid tipping and transport them in a ventilated vehicle area.</p> |  |

|     |                                                                                                                                                                                                                                                           |  |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 11. | <b>What’s better 24 Volt or 48 Volt systems?</b>                                                                                                                                                                                                          |  |
|     | <p>Systems with loads greater than 100 watts continuous will be better served by higher voltages such as 24V and 48V due to the reduced size of wiring required to minimize voltage drop, which impacts overall system cost and ease of installation.</p> |  |

|     |                                                                                                                                                                                          |  |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 12. | <b>How long does a BW Lithium battery last?</b>                                                                                                                                          |  |
|     | <p>BW Lithium golf cart batteries support up to 10 years of lifespan and over 4000 cycles. They can reach or even exceed their optimal lifespan through proper care and maintenance.</p> |  |



|     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 13. | <b>What is BMS and its purpose?</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|     | <p>Lithium-ion batteries are made up of multiple small cells connected together to provide the voltage and current needed for the application. The Battery Management System or BMS is responsible for keeping these cells working in unison so that they are charged and discharged correctly. Lithium-ion cells are more sensitive to overcharge and undercharge conditions than many other battery chemistries. The BMS monitors the charge and discharge of the battery to ensure the battery operates safely.</p> <p>BW Lithium developed a BMS for our lithium batteries that is able to monitor individual cells, internal battery temperatures, state of charge, state of health plus charging voltage and current to provide the safest and most reliable operation possible.</p> |
| 14. | <b>Which Lithium chemistry is used?</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|     | <p>BW Lithium batteries use Lithium-Iron-Phosphate cells. For most applications, lithium iron phosphate—or LiFePO<sub>4</sub>—is a safer chemistry than comparable lithium-ion batteries that use Nickel Manganese Cobalt or NMC-based chemistry cells.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

