



# EBMX SURRON BATTERY OPTIONS

### **60V 50Ah EBMX SurRon Battery**

Do you want to nearly double the range of the stock 60V battery using the stock controller and to have all of that extra power in the same space of your stock battery? Or do you want to run a high powered monster SurRon with up to 15kW of power!?! Well this high powered 60V battery has you covered for both occasions!

### **72V 42Ah EBMX SurRon Battery**

Are you a thrill seeker that is after ultimate performance, extreme power density and up to a 15kW tune?! This massively powerful 72v battery will deliver all the thrills you could want and do it while still fitting in the stock SurRon battery slot as a plug and play solution. Note this battery will require the use of a EBMX controller upgrade and will not run on the stock 60v controller. In addition, this battery will require a new 72v controller and cannot be charged on the stock 60v charger.

### **EBMX Fast Charger**

Our new fast charger will cut charge times on batteries in half, delivering twice the amps that the stock SurRon chargers are capable of delivering. There are two models, one for 60v batteries and one for 72v batteries.

*\*\*Note that if you run a high powered (above 8.5kW – 15kW) tune with the EBMX 60v battery, you will no longer be able to use your stock battery (even when bypassed) as the battery will not have the ability to supply the power needed and will cut out.*

<b>60v 50Ah &amp; 72v 42Ah LG POUCH CELL BATTERY OPTIONS</b>	
	<b>USD</b> (Price does not include VAT in Country of Purchase)
<b>Battery (Either 60v or 72v)</b>	\$ 1,885.00
<b>72v Standard Charger (for 60v Batteries, use OEM Charger)</b>	\$ 150.00
<b>Fast Charger (either 60v or 72v)</b>	\$ 325.00

Note: If you are purchasing the 60V battery you will be able to use the stock 60V charger that came with your bike. If you are purchasing the 72V battery, you will need to order the one of the two charger options.

Note: Internal shipping in your country of residence is not included in the price and will be calculated based on your delivery address unless you are picking up directly from the distributor.

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### **60v 50Ah EBMX SurRon Battery**

**BMS (160amp continuous/300A peak)**

**Full Charge: 67.2v**

**Empty Charge: 48v**

**Please See Pricing in table on pg. 1**



### **72v 42Ah EBMX SurRon Battery**

**BMS (160amp continuous/300A peak)**

**Full Charge: 84v**

**Empty Charge: 60v**

**Please see Pricing in table on pg. 1**





# EBMX SURRON BATTERY OPTIONS

## (Frequently Asked Questions)

1. How do these batteries differ from the stock SurRon/Segway batteries? Why do I need one?

- The stock SurRon/Segway battery is a 60Volt 32Ah battery with a limited discharge current. As such, without modifications, the stock battery is unable to be used for power upgrades and is often lacking on capacity for people wanting to do longer rides. With modifications like BMS bypasses on the stock battery, the battery is still limited in its performance due to the low discharge rate of the Panasonic cells that are used. So, while pushing these cells to make more power, the voltage sag under load increases, also the battery internal temperature increases (reducing available power and the lifespan of a BMS bypassed stock battery). This happens because the bypassed batteries are operating the cells above their “continuous discharge” rating, in the so called “peak discharge” rating. Also while increasing power on the stock battery with a BMS bypass will decrease the range on the bike due to being able to use up the available power much faster.

Our EBMX 60v 50Ah battery solves all of these issues and it works for multiple applications.

1. While running the stock controller, you will experience nearly double the range on a charge over a stock battery
  2. The 60V 50Ah and the 72v 42Ah Battery are both equipped with top notch high discharge rate Li-Ion cells (6C continuous discharge rate), meaning they are able to provide a lot more power than a stock battery while also the range increases greatly. Both EBMX batteries fully support our popular 15kW / 600-800 Phase Amp BAC8000 EBMX-tune with motor temperature protection feature. In fact, the cells in the 60V50Ah and the 72V42Ah batteries are capable of delivering even more than 15kW, while still operating within the cells “continuous discharge rate”. A battery Cell that is never forced to run in the “Peak discharge” range, is creating a lot less heat during use, it runs more efficiently, and also it experiences less voltage sag under load (=more power at the same setup). These factors together, guarantee a battery that will last for many years to come.
2. What is the charge cycle life of the batteries?
- These batteries are extremely robust and will retain 80% capacity after 1000 charge cycles. In other words, if you charged the battery up twice a week for 10 years, the battery pack would still retain 80% capacity
3. What is the warranty like on the batteries?
- The batteries will come with a 2 year factory warranty. If there are issues with your battery in the first two years, your battery will be repaired or replaced. Shipping costs will not be covered under the warranty.
4. How do these batteries deal with wet weather and rain?
- The battery packs are IP65 rated which means they are protected against low pressure water jets from any direction as well as condensation and water spray. However, it is advisable to always remove your battery prior to washing your bike just to be safe.



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### (Frequently Asked Questions)

5. Is the battery case made out of plastic like most of the other batteries on the market?
  - Nope! Our cases are made from metal and are lined with a genuine Line-X spray coat which provides a very durable and good looking battery box.
6. What type of battery cells are used in both of the batteries? Are they 18650 or 21700 cells?
  - Neither! We are using high quality LG and SKI pouch cells that are typically used by big e-Car manufactures. Using pouch cells, we are able to cut down on the number of battery connections inside of the battery pack and use heavier gauge connections. Both of these changes ensure our batteries withstand harsh riding better than the conventional cell type battery packs. Power density of pouch cell is also much better (using all the space in the battery pack for power instead of packaging), which contributes to the overall low weight of the batteries, improving the bikes power to weight ratio.
7. Will it hurt my battery to charge it with the fast charger? Is it okay to use by stock 60V charger on the 60V 50Ah battery?
  - No, our batteries are designed to cope with high amp charging, it will not negatively affect the life of your battery (see FAQ#1). Yes, using the stock 10Amp 60V charger is totally fine for charging the EBMX 60V 50Ah battery (it will just take a while longer than the fast charger). Both with charging and discharging, there is a good amount of head room built into the both batteries. The fast charger we supply, charges below 50% of the cells actual Amp limit for charging (continuous charge rate), while still being twice as fast as the stock 60v charger.
8. How long will it take to charge the new EBMX batteries with the fast charger?
  - The charge time will be approximately half that of the standard battery and charger. We are getting charge times of around 2 hours when the battery is quite low and seeing it charge in just over an hour if we have not drained the battery too much after a ride. Keep in mind that these batteries have 150% the kWh (battery energy capacity) of a stock battery.
9. What is the capacity of the Battery Management System (BMS) on these batteries?
  - Both batteries are equipped with ANT 160Amp continuous, 300Amp peak BMS. This provides more than ample power for up to 15kW tunes when paired up with our BAC4000 and BAC8000 controller kit upgrades.
10. How much do the batteries weight?
  - Our batteries weight in at 33lbs (15kg)