



# Storage Procedure

Rev. 2 ©2018 Lithionics Battery

Storing your battery at the correct specifications is important as it keeps the battery in the healthiest state possible for the fastest deployment when needed. Consult the table below for proper storage conditions.

Storage		
Storage Temperature & Humidity Range	< 1 Month	-4~95°F (-20~35°C), 45~75%RH
	< 3 Months	14~86°F (-10~30°C), 45~75%RH
Long Term Storage	If the battery needs to be stored for > 3 months the voltage should be 13.2V for a 12V battery (or 3.3V x number of cells in series) (~50%SOC), and stored at the recommended storage specifications shown above. Additionally, the battery needs at least one charge-discharge-recharge to 50% SOC cycle every six months.	
Self-discharge rate	≤3% per month	

## Typical storage scenario < 3 months:

1. Fully charge the battery.
2. Turn the battery **OFF** by the On/Off/Storage switch.
3. Keep the battery in an environment according to the specifications shown above.

## Typical storage scenario > 3 months:

1. Reduce the battery SOC to 3.3V/cell which is 50% ±10% SOC.  
**Note:** See chart below for cell voltage calculation.
2. Turn the battery **OFF** via the On/Off/Storage switch.
3. Keep the battery in an environment according to the specifications shown above.
4. Every 6 months charge the battery to 100% SOC, then discharge the battery to LVC, then charge it back to 50% ±10% SOC.

Battery Voltage	Number of Cells	~50% SOC Voltage
12V	4	13.2
16V	5	16.5
24V	8	26.4
36V	12	39.6
48V	15	49.5
51V	16	52.8
64V	20	66
76V	24	79.2
96V	30	99
102V	32	105.6
201V	63	207.9