Lithium ion storage batteries

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In general, Lithium ion batteries (Li-ion) should not be stored for longer periods of time, either uncharged or fully charged. The best storage method, as determined by extensive experimentation, is to store them at a low temperature, not below 0?C, at 40% to 50% capacity. Storage at 5?C to 15?C is optimal. Since lithium batteries self-discharge, it is recommended that they must be recharged every 12 months.We can further divide it into short-term storage and long-term storage.

Short-term storage: Store the battery in a dry place with no corrosive gases and a wet temperature between -20?-35?, higher or lower temperature will cause the metal parts of the battery to rust or the battery to leak.

Long-term storage: As long-term storage will cause the battery activity passivation and accelerate the self-discharge rate, the ambient temperature should preferably be between 10?-30?, in addition, it is necessary to do a charge/discharge cycle every 3 months to maintain its activity and recovery performance.

Charge 40% to 50% of the battery charge, and refrigerate in a dry environment. Cooler temperatures and less charge is conducive to maintaining the life of the battery, but too little charge can not be, because the battery will be self-discharge in storage, once the battery slowly run out of power, it will seriously shorten the battery life.

1.Cell or battery warehouses should be set up independently.Set up “No Fireworks” eye-catching signs in storage places. It is strictly forbidden to stack combustibles and flammable items around.

2.The temperature of cell or battery warehouses should be controlled within the range of 20?5?,The maximum should not exceed 30?,The relative humidity should not be greater than 75%.Keep the warehouse clean, dry and well ventilated, and do not store other items.

PS:1.Explosion-proof electrical equipment should be used in battery warehouses and aging rooms.2.Faulty batteries and waste batteries must be placed in special treatment cabinets for isolation and disposal, and the use of explosion-proof sand buckets to deal with accident batteries is advocated.

1. For Lithium-ion batteries which need to be stored for a long time and not used, they should be kept in a state of 50%-60% charge. They should be recharged every 3 months and recharged every half a year.

3. It is forbidden to use or place the battery at high temperatures (in hot sunlight or in very hot cars), otherwise it may cause the battery to overheat, catch fire or fail in function, and shorten its life.

4. It is forbidden to store in places with strong static electricity and strong magnetic fields, otherwise it will easily destroy the battery safety protection device and bring unsafe hidden dangers.

For lithium-ion batteries, studies have shown that it is possible to lose 3 to 5 percent of charge per month, and that self-discharge is temperature and battery performance and its design dependent. In general, self-discharge is higher as the temperature increases.