Battery lifespan of Lithium Ion Battery

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What is the battery lifespan of Lithium Ion Battery

It is difficult to provide an exact life expectancy of a rechargeable battery. Battery life is affected by different variables such as the amount of use, the environment in which the battery is being used, and the type of product with which the battery is being used. The battery capacity decreases over time and through repeated use.

For removable batteries it is probably time to replace the battery with a new one, if decreased usage time between charges becomes significant.

Follow the guidelines below to take care of a rechargeable battery and improve its life expectancy:

- Do not expose a removable battery pack to water; the battery itself is not water-resistant. IPX6 or IPX67 products with built-in batteries are of course packed in a way that they are waterproof.
- Do not leave the battery pack in extremely hot places, such as in a car or under direct sunlight.
- Store the battery in a cool, dry place if it is not going to be used for a long time.
- Charge the battery and use it at least once a year to maintain proper function.

A lithium-ion rechargeable battery holds a specific number of charges. If you drain the battery completely every time you use your product you can expect approximately 400 charges before the capacity is going to decrease significantly.

A partial discharge reduces stress and prolongs battery life. This means that if you do not fully discharge the battery before charging again, you may achieve a lot more charging cycles.

Minimize the amount of time the battery spends at either fully charged or completely drained. Both extremely high and low "states of charge" stress batteries.

If you wish to store the battery, it should have a residual capacity of around 2/3. This will prevent deep discharging, which can have a negative impact on performance, shorten the service life or even cause the Li-battery to become inoperable.