

## SolarInnovate Energy Solutions

# How long does a tool lithium battery discharge



All in one  
**50-500 Kwh**  
Hybrid  
System



## Overview

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How long does a power tool battery last?

At this point in time, most power tool manufacturers claim you should expect to get over 1,000 charge cycles out of any given battery. That equates to 2.7 years if you charge your pack once per day or 3.8 years if you only factor in a 5-day week. Some manufacturers claim 2,000 charge cycles, in which case you can double those numbers.

How long do lithium batteries last?

Most lithium batteries have a cycle life of 300 to 500 cycles, which usually translates to 2 to 5 years of regular use. But, not all lithium batteries are created equal. For example, Lithium Iron Phosphate (LiFePO<sub>4</sub>) batteries can last much longer, sometimes up to 15 years, thanks to their higher cycle life.

How long do lithium iron phosphate batteries last?

Lithium Iron Phosphate (LiFePO<sub>4</sub>) batteries are known for their durability and safety. They have a long lifespan, often lasting between 5 to 15 years, depending on usage. These batteries can handle more charge-discharge cycles than most other lithium batteries—up to 3,000 to 5,000 cycles.

What voltage should a tool battery be discharged at?

There will always be some voltage left even when the battery pack no longer runs your tools. They are considered discharged at 1.1V per cell. Using the tool is the safest way to discharge these types of batteries. NiMH batteries have a higher capacity, so they hold more power, but they let it out at a similar rate to the Cadmium batteries.

What is the difference between NIMH and lithium ion power tool batteries?

NiMH batteries have a higher capacity, so they hold more power, but they let it out at a similar rate to the Cadmium batteries. They will be fully discharged at 1V per cell. A lot of newer Lithium-Ion power tool batteries have an

indicator on the battery.

How long does a lithium titanate battery last?

Lithium Titanate (LTO) batteries are another type with an exceptional lifespan. These batteries can last up to 20 years, with some models rated for tens of thousands of cycles. LTO batteries are commonly used in electric vehicles, grid storage, and other high-demand applications where longevity and safety are crucial.

## How long does a tool lithium battery discharge



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## Unveiling the Lifespan of Power Tool Batteries: How Long Do ...

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