60V 30Ah Lithium Battery Mileage Explained

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What Determines Your 60V 30Ah Lithium Battery Mileage?

You know that sinking feeling when your e-bike dies halfway up a hill? Let's break down what truly affects your battery's range. The mileage potential of a 60V 30Ah lithium battery isn't just about specs on paper - it's a dance between physics and real-world conditions.

The Hidden Energy Equation

Here's the kicker: 60V x 30Ah gives you 1.8kWh theoretical capacity. But wait, no...actual usable energy is about 85% of that to prevent over-discharge. So you've really got 1.53kWh working for you. Now picture this: a 500W e-bike motor would drain this in 3 hours flat. But who rides non-stop like that?

12 Factors Actually Affecting Your Ride

Highjoule's field data from 2,300 commercial EVs shows:

- Ambient temperature (Li-ion hates