

SolarInnovate Energy Solutions

How to test the capacity of new energy battery cabinet





Overview

How to test battery capacity?

This post demonstrates the procedure to test the capacity of a battery. The test will determine and compare the battery's real capacity to its rated capacity. A load bank, voltmeters, and an amp meter will be utilized to discharge the battery at a specific current till a minimum voltage is achieved.

Why is battery capacity testing important?

In general, testing battery capacity is an important step in evaluating battery performance, and different testing methods have their own advantages and disadvantages. When choosing a test method, factors such as actual needs, equipment conditions, and test accuracy requirements should be considered comprehensively.

How to test battery acceptance capacity?

Before starting the acceptance capacity test, measure & record individual cell/unit float voltages. Load bank capability of delivering the required discharge current. Use digital voltmeters to check entire battery discharge voltage. Use an amp meter to check battery discharge current.

How do you calculate battery capacity?

The time-adjusted technique is recommended since it is easier to calculate while remaining accurate. See the time-adjusted approach that follows: To compute % capacity using the time adjusted technique, divide actual discharge time by the rated time, then multiply by 100. This assuming the battery is at 25°C.

How does a battery capacity tester work?

For professional maintenance personnel, the capacity tester is the preferred tool for measuring battery capacity. By simulating the actual charging and discharging process of the battery, the capacity tester can accurately measure



the capacity information of the battery.

How do you calculate a battery ampere-hour rating?

The ampere-hour rating is calculated by multiplying the number of amperes of current that the battery can supply by the number of hours it takes to reach a specific end point voltage. For an accurate current determined during the test, the time of the test should match the calculation.



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